UNIVERSITY OF MICHIGAN

REGENTS COMMUNICATION

Received by the Regents
June 18, 2015

Item for Information

Subject: Report of University Internal Audits

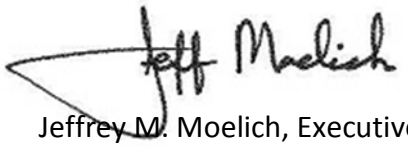
Attached is the report of activities completed by the Office of University Audits for the period **March 1 through April 30, 2015.**

Included in the report are a:

- Summary of each audit report issued during the period, including Management's Corrective Action Plans. These audits were presented at the Regents' Finance, Audit, and Investment committee meeting in March.
- Summary of each follow-up review memo issued during the period, including the actions completed by management. Follow-up reviews are designed to provide assurance that Management's Corrective Action Plans have been implemented, are working as intended, and are sustainable.
- Table of open audit issues as of **April 30, 2015**, including estimated completion dates.

If you have any questions or would like additional information, please contact me at 647-7500 or by e-mail at jmoelich@umich.edu.

Respectfully submitted,



Jeffrey M. Moelich, Executive Director
University Audits

OFFICE OF
UNIVERSITY AUDITS
UNIVERSITY OF MICHIGAN

Board of Regents
Internal Audit Reports – March 1 through April 30, 2015
June 18, 2015

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Reports Issued

Department of Pathology 2015-210

Report issued March 2014

A. Executive Summary

1. Overall Conclusion

The Department of Pathology's (Pathology) experienced management staff that is focused on supporting strong operational controls and fiscal responsibilities. The strong attention to clinical laboratory safety and accreditation standards is notable; given much of the clinical laboratory space is located in the same hospital footprint and square footage as in the 1980s. Management is currently embarking on a multi-year project to use upgraded laboratory space at the North Campus Research Facility to ease their current space constraints.

One area that poses operational risk is the MLabs reference lab and outreach services. Pathology internally manages the billing and collections operations to external organizations such as hospitals and other health care facilities that use Pathology services. This function requires specialized handling and is not well suited for the centralized UM Hospitals and Health Centers (UMHHC) third party billing operations. Internal controls in the billing operations are lacking. Standard operational controls, such as segregation of duties, credit and collection policies, monitoring reports, and standardized external party agreements are needed. Management has committed to improve operational controls and has already implemented several actions to address audit recommendations.

Management has also committed to improve controls related to equipment tagging and tracking; the faculty, student, and staff off-boarding processes; conflict of interest management; and documentation of exceptions to the faculty compensation plan.

2. Context and Key Risk Considerations

Pathology is a major clinical, academic, and research department of the Medical School. The chair reports to the dean of the Medical School, with a dual reporting line to UMHHC Operations and Clinical Services for clinical laboratory operations. Over the past two years, Pathology has had transitions in the chair position. A new chair was appointed to the position in September 2014.

Along with offering services in hospital-based diagnosis, the department trains medical residents and students and conducts research. Pathology has 151 faculty members, 930 laboratory, administrative and research staff, 48 residents, and 22 Ph.D. students. The eight divisions are Anatomic Pathology, Clinical Pathology, Education, Finance and Administration, Informatics, MLabs, Sponsored Programs, and Translational Research.

The fiscal year 2014, hospital gross clinical operating revenues were $601 million. The Medical School gross clinical revenue in fiscal year 2014 was $61 million and the overall all funds revenue was $53.7 million.

Pathology MLabs division serves as a full-service reference laboratory and provides diagnostic testing services to more than 30 hospitals, 200 physician practices, and several outside labs, community health centers, extended care facilities, and home healthcare agencies. In fiscal year 2014, Pathology billed approximately 414,000 units of work for its outreach services resulting in professional and technical gross charges of $58.2 million to both client and third party payers. Pathology manages billing and collections for all MLabs institutional clients.

3. Audit Scope and Identified Risks

The table below lists the key activities audited, along with the overall risks of the audit issues identified for each sub-activity. The scope of the audit was determined based on an assessment of the risks associated with the activities of the Department of Pathology. This process included input from Pathology management and stakeholders from other university functions.

	Key Activities Audited				
Sub-activities Audited	**MLabs**	**Sendouts**	**Clinical Lab Safety**	**Conflict of Interest/ Conflict of Commitment**	**Equipment Management**
	Agreements (Issue 1)	Billing	Risk management	Compliance with policy (Issue 5)	Record-keeping (Issue 3)
	Billing (Issue 2B)	Lab formulary committee	Lab safety	Monitoring of management plans	Inspections (Issue 3)
	Credit and collections management (Issue 2A)		Continuity of operations	Compliance hotline	Repairs and maintenance (Issue 3)
			Physical security		

Legend: Overall risk conclusion for each sub-activity		
High Risk	**Medium Risk**	**No Issues Reported**

Sub-activities Audited	Key Activities Audited			
	Human Resources and Compensation	**Accreditation, Licensing, and Inspections**	**Fiscal Responsibility**	**Procurement, strategic sourcing and supply chain**
	Off boarding process and notice of termination (Issue 4)	Staff credentials and licenses	Gap Analysis	Purchase orders and approvals
	Faculty compensation plan (Issue 6)	Privacy	**Cash management (Issue 2B)**	Metrics and monitoring
	Overtime and other compensation	Inspections and accreditations	Credit card controls	Chemical inventories
	Timekeeping and payroll		Grant management	Vendor utilization
	Hiring, job descriptions, and evaluations		Financial monitoring and oversight	

Legend: Overall risk conclusion for each sub-activity		
High Risk	**Medium Risk**	**No Issues Reported**

The audit focused on business operations and other operational areas. The following areas were not part of the scope of this audit:

- Paradigm Joint Venture (part of Michigan Health Corporation)
- Pathology Informatics (separately audited by University Audits)
- Charge capture/clinical coding/medical records
- Academic programs, trainees, fellows, residents
- Morgue, autopsy, and forensic services
- Medical School lab safety (Clinical lab safety was included in the audit scope)
- Physician credentialing (managed centrally at the Medical School)

4. Audit Objectives

An operational audit was conducted at the request of the Dean of the Medical School due to recent leadership transitions. The objectives of the audit included:

- Assess billing and operational controls over MLabs and the use of external reference labs
- Assess institutional and departmental monitoring and oversight of clinical lab safety
- Determine whether the conflict of interest/conflict of commitment (COI/COC) process is comprehensive and complete, effectively communicated to faculty and staff, and managed
- Verify that equipment is acquired, inspected, maintained, tagged, tracked, and disposed according to university policy
- Assess controls over employment, payroll, and timekeeping functions

- Assess controls over staff credentialing, licensing, inspections, training, and privacy
- Assess controls over budgeting, financial reporting, and reconciliations
- Assess controls over cash handling, credit card transactions, grant management, and completion of the gap analysis and internal control certification
- Assess controls over procurement and supply chain

B. Audit Issues and Management Action Plans

This section of the report provides details of the high and medium risk issues identified during the audit. See Appendix 1 for risk definitions.

1. MLab Agreements — High

Issue: MLabs management does not consistently establish agreements for reference lab work/outreach services provided to external clients such as hospitals, labs, and extended care facilities. Existing agreements are not periodically reviewed and updated.

Risk: Roles and responsibilities of MLabs and clients are not defined, which may lead to additional liability. Terms and conditions in agreements may not conform to regulatory and U-M requirements.

Support: MLabs enters into service agreements only when requested by an external client, and these agreements do not have an expiration date. Agreements do not follow a consistent format and some are over 20 years old. In addition, MLabs invoices sent to institutional clients do not include any key terms or conditions regarding service performance, payment terms, and expectations.

In contrast, UMHS has an agreement with a major academic medical center that provides reference lab services for specialty testing not performed at UMHS. The agreement is up-to-date, contains key terms and conditions, and establishes roles, responsibilities and liability.

Recommendation: Consult with the Office of General Counsel (OGC) and the tax department to determine when agreements are necessary and what form they should take. Consider developing and using agreement templates that are periodically reviewed and approved by OGC. In consultation with OGC, identify and document signature authority for these agreements. All invoices should include payment terms and other key provisions. Consult with the tax department about potential unrelated business income.

Management Action Plan: The department will consult with OGC and the Tax Department to determine when agreements are necessary and in what form. The department will meet with the Tax Department to readdress any potential unrelated business income tax.

Action Plan Owners: Chief department administrator for Pathology and MLabs program manager

Expected Completion Date: May 2015

2. MLabs Revenue Cycle — High

A. Credit and Collections Management

Issue: Pathology does not have an effective credit and collections process to control the risk of extending credit to unqualified institutional customers.

Risk: Revenue may be lost due to uncollected accounts. There is potential for overstatement of revenues and accounts receivable.

Support: Pathology can review individual institutional account detail within a department maintained billing database, but they have not developed:

- Tools to determine the financial health of clients and identify those who may be credit risks
- Monitoring reports (e.g., A/R aging) to assess the collectability of outstanding accounts.

Our review of A/R data extracted from MiChart as of January 19, 2015, showed that there are some significant past due balances over 120 days as shown below:

Days	0-30	31-60	61-90	91-120	Over 120	Total
Balance	$2,661,443	$2,065,835	$327,933	$183,673	$562,496	$5,805,040
	45%	36%	6%	3%	10%	100%

Three large clients, for whom MLabs is still providing services, are responsible for over 80% of the over-120 day overdue accounts. Total outstanding amounts for these three customers is $1.6 million.

Recommendation: Develop, document, and implement a credit and collections policy in line with the UMHS policy that includes specific steps to ensure that receivables are collected in a timely, fair, and cost effective manner. The policy should include:

- Procedures for collecting and recording the receivables
- Roles and responsibilities along with adequate internal controls to ensure proper segregation of duties
- Periodic reviews of the aged A/R to determine amounts that are uncollectable
- Write-off procedures for bad debt
- Appropriate measures to address delinquencies such as sending reminders for late payments and initiating additional collection actions as necessary

Develop reports in conjunction with the UMHS Revenue Cycle to:

- Monitor aged invoices
- Ensure that all payments are received from the clients, and
- Take appropriate actions against accounts that are slow to pay

1. MLab Agreements	High

B. Billing and Cash Handling Controls

Issue: Management is not providing the proper oversight and controls for processing MLabs billing operations. Billing controls are limited and the same person who generates the invoice also updates billing rates, receives the checks, and posts client payments.

Risk: Misappropriation of financial assets or errors may go undetected and uncorrected.

Support: Pathology receives and deposits checks for MLabs services provided to institutional clients. In fiscal year 2014, $7.5 million was collected and deposited for these services. Checks come in via mail, and most checks are transferred to a different location to be opened and posted to client accounts. Not all checks are restrictively endorsed when received or deposited on the date of collection as required by university policy.

Two Pathology employees have responsibility for invoicing, posting, and collecting payments:

- The first employee generates the invoices for the professional fees, has the ability to update the professional fee rates, receives checks, and posts payment for both the technical and professional monthly invoices in the Oracle database and in MiChart. This part of the cash handling was not included in written departmental procedures and staff were not included in the cash handling training.
- The second employee creates and sends invoices, collects checks, posts payments, and makes deposits. These payments are for clients who are not regular customers and do not have an institutional account established in MiChart.

Recommendation: Segregate the billing, posting, and collection duties to ensure that no single individual is performing multiple functions. Restructure the processing of MLab checks so deposits are made within 24 hours after receipt. Work with Treasury to consider use of remote deposit technology**.** Build the following cash handling controls into the process:

- Restrictively endorse checks when received
- Independently log checks as received and reconcile to deposits
- Deposit funds on the date of collection or the next day
- Develop written policies and procedures
- Ensure checks awaiting deposit and any sensitive information is safeguarded
- Provide cash handling training for staff handling checks or credit cards

Management Action Plan: 2A) The department has already developed a tool to address aging client A/R and will formalize a credit and collections policy in the coming weeks. 2B) The department has already segregated the billing, posting, and collection duties and has already requested delivery of a remote deposit point system. This technology will be installed by early March 2015. The department will develop and deploy new written policies and procedures for cash handling and ensure staff take the required training.

Action Plan Owner: Finance director for Pathology

Expected Completion Date: May 2015

3. Equipment Management	Medium

Issue: Pathology does not have an efficient and effective process to manage and track their equipment.

Risk: Risks of not managing and tracking equipment may result in:

- Citations from accrediting agencies, such as the Joint Commission and CAP (College of American Pathologists).
- Nonperformance or delay of Biomedical Engineering safety checks
- Inability to track and identify ownership if the equipment is damaged, destroyed, or missing. In some instances, insurance claims cannot be made if records are lacking.
- Delays in performing the required equipment repairs and maintenance
- Unnecessary expenses for on-site vendor preventative maintenance calls for equipment that cannot be located or is no longer in service

Support: Pathology does not consistently work with the UMH Facilities Administration (UMH FA) to ensure that all equipment is tagged and accurately tracked. Out of a sample of 30 equipment purchases chosen for testing, 24 had not been tagged.

Equipment cannot be taken off the preventive maintenance schedule unless it cannot be located for three preventive maintenance cycles. This results in unnecessary costs paid to vendors who come on-site to service equipment only to find out that it cannot be located, is no longer in service, or has been removed.

Recommendation: Work in conjunction with UMH FA and Biomedical Engineering to make sure all equipment is accurately tagged and tracked. When new equipment is obtained, notify UMH FA to ensure that assets are tagged so that they can be tracked and maintained in the computerized maintenance management inventory system (Maximo). Inform Equipment Management Services when Pathology equipment is no longer in service so that preventive maintenance agreements can be updated.

Management Action Plan: The department will work with UMH FA and Biomedical Engineering to ensure all equipment is accurately tagged and tracked. They will also develop a procedure for new equipment to ensure it is tagged and maintained.

Action Plan Owners: Administrative Manager for Pathology and Director of Facilities Planning and Development

Expected Completion Date: May 2015

4. Off-Boarding Process	Medium

Issue: Pathology does not have a complete and robust process for off-boarding employees who terminate employment or transfer to other departments within the university, or for non-employees such as vendors and contractors whose service has ended.

Risk: Physical access to sensitive areas may not be terminated. Critical data, keys, and equipment held by the employee may not be returned. Access to patient information systems may not be terminated.

Support: It is the employing department's responsibility to ensure that notification is given to terminate payroll, computer system access, and facility access. During the course of audit fieldwork, we observed multiple off-boarding processes and identified the following issues:

- Standardized off-boarding forms are not in use
- One out of three units reviewed does not use an off-boarding form or checklist. The two units reviewed that do use an off-boarding form are using a version that UMHS Human Resources stated is not currently in use but acknowledged that some units still submit
- Three Pathology locations where both Pathology employees and non-employees still had facility access after the individual had retired, been terminated, relocated, or service ended and reason for access was no longer needed. Some departures dated as far back as 2009
- Some temporary employees in Pathology are not terminated from the payroll system upon departure. At the point when payroll is terminated, facility access and computer access is also terminated. The department relies on the delayed automatic system termination after 4 months of payroll inactivity.

Recommendation: Develop and implement an effective off-boarding process with clearly defined responsibilities to facilitate proper processing of faculty, staff, and non-employee resignations, transfers, and terminations. Coordinate the process with other university offices such as Human Resources and the Key Office that share in the termination process.

Management Action Plan: The department will develop an off-boarding process for all faculty, staff, and non-employee resignations, transfers, and terminations. The department has already begun restricting access to certain sensitive areas. The department is exploring options with Human Resources and the Key Office to facilitate the timely termination of access privileges for individuals no longer employed by the department.

Action Plan Owners: Chief department administrator for Pathology, finance director for Pathology, and chief human resources officer for UMHS Shared Human Resources

Expected Completion Date: May 2015

5. Annual Code of Conduct Attestation	Medium

Issue: Management does not consistently require completion of the UMHS Code of Conduct Attestation on an annual basis.
Risk: Not all staff confirm their confidentiality and integrity to act in the best interest of the university when performing their duties. Actual or potential conflicts may not be disclosed and managed.

Support: As stated in the UMHS Compliance Program Booklet, all UMHS employees must sign and confirm to the Code of Conduct Attestation every year. If an employee does not complete the annual MLearning module, they are required to sign a hard copy of the form on an annual basis. Signed hard copies should be maintained in the personnel or other appropriate file.

Pathology hospital staff complete the Code of Conduct Attestation through the MLearning compliance module COMPL-1000. Medical School faculty and management are required to make annual disclosure in M-Inform. Only Pathology non-management medical school staff are not consistently completing the annual attestation.

The Code of Conduct Attestation covers the following standards of conduct that staff are required to uphold:

- Compliance with policy and procedures
- Avoiding fraud, waste and abuse
- Protecting the confidentiality and security of information
- Disclosing actual and potential conflicts of interest or commitment and comply with any plans imposed to manage the conflicts
- Conduct self in a professional and cooperative manner
- Disciplinary actions for noncompliance
- Responsibility to report any suspected noncompliance

Recommendation: Create a process to validate that any Pathology staff not covered under another disclosure process complete the Code of Conduct Attestation on an annual basis.

Management Action Plan: The department will deploy a Code of Conduct Attestation process for staff in conjunction with the annual evaluation process.

Action Plan Owners: Chief department administrator for Pathology, finance director for Pathology, and chief human resources officer for UMHS Shared Human Resources

Expected Completion Date: August 2015

6. Faculty Compensation Model	Medium

Issue: Management has not documented the process of how they calculate faculty compensation or the reason when faculty compensation varies from the compensation plan.

Risk: This process would be difficult to perform or recreate if key staff left or the spreadsheet was damaged.

6. Faculty Compensation Model	Medium

Support: Faculty members receive a base salary and may receive various supplements and incentive payments based on their appointments and types of effort. The faculty compensation model used is a complicated process. It involves multiple steps, and acquires data and input from different sources. One staff member has primary responsibility for collecting compensation data and compiling it into an Excel spreadsheet.

University Audits reviewed faculty compensation calculations for the 119 faculty in fiscal year 2014 and determined that calculated and paid compensation correctly followed the compensation model with one exception. One faculty member was offered and paid a base salary that was different from that stated in the Faculty Compensation Plan. Staff did not know the reason for the variance. Audit testing also showed seven examples of inconsistencies on the Excel spreadsheet where faculty base pay data or title had not been updated to be consistent with the compensation plan or payroll data.

Recommendation: Develop and document detailed procedures for maintaining, verifying accuracy, and securing the faculty compensation payment calculation process. Documentation should include all staff duties involved in the process and should also document exception processes. Develop and document processes and controls supporting the Excel spreadsheet that is used to calculate compensation and include:

- Purpose of spreadsheet and how it works
- Source of input data
- Explanation of and backup location for formulas
- Location of spreadsheet backup
- Spreadsheet security controls such as locked cells, access, and version maintenance

Management Action Plan: The department will develop and document detailed procedures for maintaining, verifying accuracy, and securing the faculty compensation plan.

Action Plan Owners: Finance director for Pathology and academic human resources manager

Expected Completion Date: May 2015

Medical School Department of Biological Chemistry 2015-208-2

Report issued April 2014

A. Executive Summary

1. Overall Conclusion

University Audit recently completed an audit of business operations and fiscal responsibilities at the Medical School Department of Biological Chemistry. The department is one of many biosciences departments at the university and shares many similar problems; aging faculty and infrastructure, competing priorities, and issues with long-term financial viability.

There has been interim departmental leadership over the past two years pending development of a university-wide strategy for the biological and biomedical science departments. The department administrator is new to the role and the department.

Leadership has practiced sound stewardship. There are effective controls over fiscal responsibilities, grant management, and day-to-day business operations. Moderate risk issues noted in this report were due to lack of awareness or experience and do not signify underlying internal control issues.

2. Context and Key Risk Considerations

Biochemistry is the study of chemical processes within and relating to living organisms. The Department of Biological Chemistry educates and trains undergraduate, graduate, post-graduate, and medical students in modern biochemistry. The department is primarily a teaching and research department, and is one of seven basic science departments at the Medical School.

The department has a growing deficit position over the last few years. Fiscal year 2014 reports show operating revenue of $8.4 million with an overall operating loss of $(1.7) million and an ending general fund deficit balance of $(1.6) million. Medical School leadership acknowledges that the current funding model does not effectively support the basic science departments. These departments lack income streams available to other Medical School departments, such as clinical income and significant research funding. Medical School leadership is currently developing a sustainable financial model for its basic science departments.

President Schlissel has recently created a President's Advisory Panel on the Biosciences and has charged the panel with developing a recommended strategy that will propel U-M to the forefront in critical areas of life science research. This advisory panel recommendation may significantly affect the future and organization of the basic science departments such as Biological Chemistry, not only at the Medical School, but also departments in other schools and institutes at U-M.

3. Audit Scope and Identified Risks

The table below lists the key activities audited, along with the overall risks of the audit issues identified for each sub-activity. The scope of the audit was determined based on an assessment of the risks associated with the activities of the Department of Biological Chemistry. This process included input from Biological Chemistry management and Medical School leadership.

Sub-activities Audited	Key Activities Audited				
	Fiscal Responsibilities	**Grant Management and Lab Safety**	**Conflict of Interest/ Conflict of Commitment**	**Recharge Services**	**Human Resources**
	Gap analysis and internal control certification	Financial oversight	Disclosure of conflicts	Approval of rates	Joint appointments
	Financial monitoring and oversight	Federal spending requirements	Monitoring of management plans (Issue 2)	Adequacy of rates	Minimum pay requirements for research classifications
	Cash handling and procurement controls	Effort reporting (Issue 4)	Compliance hotline		Time in rank for research classifications (Issue 3)
	Statement of Activity (SOA) reconciliation	Cost transfers			Job descriptions and evaluations
	Tuition revenue allocation	Subcontract management			Timekeeping and payroll
	Policies and procedures	Safety inspection results			
	Asset management				
	Security of sensitive data (Issue 1)				
	Continuity of operations				

Legend: Overall risk conclusion for each sub-activity		
High Risk	**Medium Risk**	**No Issues Reported**

The audit focused primarily on administrative and business operations. The following areas were not part of the scope of this audit:

- Research compliance areas such as bio-safety, human subjects, animal use, and controlled substances that are managed and monitored by other institutional compliance organizations
- Intellectual property and royalty revenues managed centrally by the Office of Technology Transfer
- Instructional faculty recruitment, evaluation, and tenure
- Graduate student admissions and academic matters
- Facilities, including key and building access, managed centrally within the Medical School

4. Audit Objectives

This audit was conducted at the request of the Dean of the Medical School due to recent leadership transitions. The objectives of this audit were to:

- Assess the department's policies, procedures, and control environment associated with fiscal responsibilities.
- Assess the department's grant management for compliance with university and sponsor requirements.
- Evaluate compliance with Conflict of Interest/Conflict of Commitment policy
- Determine whether recharge rates are appropriately managed.
- Evaluate management of joint appointments and research classifications.
- Evaluate timekeeping, payroll, and employment process to determine whether they are effectively managed and in compliance with university policies.
- Assess process for physical and data asset management.
- Validate that the corrective actions recommended during lab inspections were addressed.

B. Audit Issues and Management Action Plans

This section of the report provides details of the medium risk issues identified during the audit. See Appendix 1 for risk definitions.

1. Sensitive Institutional Data	Medium

Issue: The department has not conducted a risk assessment of its sensitive institutional data to mitigate or correct any potential weaknesses or vulnerabilities.

Risk: Sensitive research data may not be protected and may be compromised, lost, or misused.

Support: The department engages in medical research that falls under the Information and Technology Service's classification of sensitive institutional data. The department thought that only patient health information was sensitive data and did not realize that animal research data is also considered sensitive and should be equally protected.

University policy states that data will typically be classified as sensitive if any of the following are true:

- Unauthorized disclosure may have serious adverse effects on the university's reputation, resources, or services or on individuals
- It is protected under federal or state regulations
- There are proprietary, ethical or privacy considerations.

The U-M Information Security Policy (Standard Practice Guide Section 601.27) requires each university unit to periodically conduct risk assessments around its sensitive information assets. Risk assessments, such as a Risk Evaluation of Computers and Open Networks (RECON), are part of

1. Sensitive Institutional Data	Medium

the ongoing IT security risk management at U-M. The risk assessment is designed to prioritize risks and recommend appropriate mitigation strategies.

Recommendation: Conduct a risk assessment on department systems, activities, and functions as it relates to sensitive informational assets**.** Medical School Informational Services (MSIS) or Information and Infrastructure Assurance can provide guidance.

Management Action Plan: The department administrator has contacted MSIS to begin a security risk assessment of systems, activities, and functions related to sensitive data.

Action Plan Owner: Chief department administrator

Expected Completion Date: October 2015

2. Monitoring Conflict of Interest	Medium

Issue: The department is not monitoring the conflict of interest (COI) management plan in effect for a faculty member.

Risk: Academic and research integrity, transparency, and independence may be compromised. Required disclosures and other measures to mitigate the conflict may not be performed or situations may change that require the management plan to be amended.

Support:

- The department has one faculty COI management plan in place related to the development of a for-profit company to commercialize cancer therapies.
- The purpose of the plan is to manage, reduce, or eliminate the conflict.
- Under the plan, the department chair is responsible for monitoring that the terms of the management plan are followed. Due to a change in leadership, the interim chair was not aware of the conflict and was not monitoring the management plan.
- *UMHS Policy 01-01-003 – Outside Interests and COI* states that it is the responsibility of the department chair, supervisor, and/or COI Board to monitor an individual's compliance with the conflict management plan and report any non-compliance to the applicable compliance officer and/or COI Board as appropriate.

Recommendation: Periodically meet with the faculty member to monitor that requirements of the COI management plan are followed. Develop a process when there is a leadership transition to inform new leadership of existing management plan responsibilities.

Management Action Plan: The chair will include this discussion in the upcoming annual evaluation process starting June 2015. Once recruited, the new department chair will be informed of this policy and the executive assistant will include plans with annual review information.

2. Monitoring Conflict of Interest	Medium

Action Plan Owner: Department chair

Expected Completion Date: July 2015

3. Research Investigators	Medium

Issue: The department is not advising junior research track faculty of maximum time in rank and mandatory review cycles for research scientists.

Risk: New research faculty may not be aware of promotion policies and time in rank expectations, which may jeopardize career advancement. Untimely advancements could lead to potential discrimination.

Support: The university has established a maximum time in rank policy for the rank of research investigator. After a research investigator has been in the position for four years without promotion, the appointing unit must move him/her out of the rank.

To ensure newly appointed research investigators are aware of the maximum time in rank policy, University of Michigan Office of Research (UMOR) requires all hiring units to provide a signed memorandum of understanding (MOU) that includes a statement about this policy as part of the appointment offer. The MOU should specify that the research investigator is entering the research scientist track.

This UMOR requirement took effect on November 7, 2013. Since that date, the department has promoted three research fellows into the research investigator classification without providing the requisite memorandum of understanding.

Recommendation: Develop MOUs for current research investigators regarding time in rank policy. Ensure future appointments include an MOU by implementing standard checklists and templates for research track appointments.

Management Action Plan: The department has drafted two MOUs for research investigators and research assistant professors to be completed by those in that faculty track upon hire. The draft letters have been discussed at the April 24, 2015, faculty meeting and received final approval. We will begin using these for our new hires in the research track and will have MOUs signed by three missed research track faculty hired in after the effective date.

Action Plan Owners: Chief department administrator and human resource specialist

Expected Completion Date: May 2015

4. Effort Certification	Medium

Issue: The department does not have a monitoring or escalation process in place to ensure the completion of faculty and staff effort certification requirements.

Risk: Noncompliance with federal costs principles can lead to disallowances and federal penalties.

Support:

- After reminders from Financial Operations, the chief department administrator notified faculty that needed to complete their effort certification, but did not follow up to ensure completion.
- Sixteen faculty members did not complete the certification or re-certification for fiscal year 2014. Six of the 16 faculty members had terminated/retired without completing their certification.

In response to the audit finding, the chief department administrator immediately took action to obtain the appropriate certifications.

Recommendation: Develop a standard monitoring report and routine to track effort certification until all are completed. For departing faculty and staff, add completion of effort certification to department off-boarding checklist.

Management Action Plan: The department is now at 100% effort certification completion for 2014. Upon notification to certify for upcoming years, the chief department administrator will review/print the Effort Certification Report weekly and follow up with faculty prior to the deadline. For any faculty or staff that are terminating, effort certification will be part of the off-boarding process.

Action Plan Owner: Chief department administrator

Expected Completion Date: April 2015

Medical School Department of Cell and Developmental Biology 2015-208-1

Report issued April 2014

A. Executive Summary

1. Overall Conclusion

University Audits recently completed an audit of business operations and fiscal responsibilities at the Medical School Department of Cell and Developmental Biology (department). The department is one of many biosciences departments at the university.

An interim department chair has been in place since September 2013, pending development of a university-wide strategy for the biological and biomedical sciences. The department has an experienced and effective management staff. The department operations are efficient and control-oriented, providing good support to the research and teaching missions. There are effective controls over fiscal responsibilities, grant management, and day-to-day business operations. The audit found that key risks were appropriately managed and mitigated. We have shared some best practice recommendations in a separate communication. Because no issues were identified, a follow-up review is not necessary. **This audit is closed.**

2. Context and Key Risk Considerations

The Department of Cell and Developmental Biology is an interdisciplinary department that educates and trains undergraduate, graduate, medical students, and post-graduate students in the areas of cell biology, embryology, neurobiology, and developmental biology. The department also supports a growing portfolio in stem cell research.

The department has experienced an increasing deficit position over the last few years. Fiscal year 2014 reports show operating revenue of $9.9 million with an overall operating loss of $(3.4) million and an ending general fund deficit balance of $(2.4) million. Medical School leadership acknowledges that the current funding model does not effectively support the basic science departments. These departments lack income streams available to other Medical School departments, such as clinical income and significant philanthropic gifts. Medical School leadership is currently developing a sustainable financial model for its basic science departments.

President Schlissel has recently created a President's Advisory Panel on the Biosciences and has charged the panel with developing a recommended strategy that will propel U-M to the forefront in critical areas of life science research. The advisory panel recommendation may significantly affect the future and organization of the basic science departments, not only at the Department of Cell and Developmental Biology but also departments in other U-M schools and institutes.

3. Audit Scope and Identified Risks

The table below lists the key activities audited, along with the overall risks of the audit issues identified for each sub-activity. The scope of the audit was determined based on an assessment of the risks associated with the activities of the Department of Cell and Developmental Biology. This process included input from Cell and Developmental Biology management and Medical School leadership.

Sub-activities Audited	Key Activities Audited				
	Fiscal Responsibilities	**Grant Management and Lab Safety**	**Conflict of Interest/ Conflict of Commitment**	**Recharge Services**	**Human Resources**
	Gap analysis and internal control certification	Financial oversight	Disclosure of conflicts	Approval of rates	Joint appointments
	Financial monitoring and oversight	Federal spending requirements	Compliance hotline	Adequacy of rates	Minimum pay requirements for research classifications
	Credit card, cash handling and procurement controls	Effort reporting			Time in rank for research classifications
	Statement of Activity (SOA) reconciliation	Cost transfers			Job descriptions and evaluations
	Tuition revenue allocation	Subcontract management			Timekeeping and payroll
	Policies and procedures	Safety inspection results			
	Asset management				
	Security of sensitive data				
	Continuity of operations				

Legend: Overall risk conclusion for each sub-activity		
High Risk	**Medium Risk**	**No Issues Reported**

The audit focused primarily on administrative and business operations. The following areas were not part of the scope of this audit:

- Research compliance areas such as bio-safety, human subjects, animal use, and controlled substances that are managed and monitored by other institutional compliance organizations

- Intellectual property and royalty revenues managed centrally by the Office of Technology Transfer
- Instructional faculty recruitment, evaluation, and tenure
- Graduate student admissions and academic matters
- Facilities, including key and building access managed centrally by the Medical School

4. Audit Objectives

This audit was conducted at the request of the Dean of the Medical School due to recent leadership transitions. The objectives of this audit were to:

- Assess the department's policies, procedures, and control environment associated with fiscal responsibilities
- Assess the department's grant management for compliance with university and sponsor requirements
- Evaluate compliance with conflict of interest/conflict of commitment policy
- Determine whether recharge rates are appropriately managed
- Evaluate management of joint appointments and research classifications
- Evaluate timekeeping, payroll, and employment process to determine whether they are effectively managed and in compliance with university policy
- Assess processes for physical and data asset management
- Validate that the corrective actions recommended during lab inspections were addressed

Medical School Department of Pharmacology 2015-208-3

Report issued April 2014

A. Executive Summary

1. Overall Conclusion

University Audits recently completed an audit of business operations and fiscal responsibilities at the Medical School Department of Pharmacology. The Medical School Department of Pharmacology is one of many bioscience departments at the university facing similar problems; aging faculty and infrastructure, competing priorities, and issues with long-term financial viability.

The department has had an interim chair since July 2014. The Medical School is in the final stages of an active search for a new department chair of pharmacology. The department has an experienced management staff. There are effective controls over fiscal responsibilities, grant management, and day-to-day operations. However, the control environment should be improved around sensitive animal research data and the long-term financial viability and recharging of the mass spectrometry facility.

2. Context and Key Risk Considerations

Pharmacology is the scientific study of drugs, their composition, effects, and how they are used in medicine. The department educates and trains graduate, post-graduate, dental, nursing, and medical students in pharmacology. The department is primarily a teaching and research department, and is one of seven basic science departments at the Medical School.

The department has a growing deficit position over the last few years. Fiscal year 2014 reports show operating revenue of $9.1 million with an overall operating loss of $(1.7) million and an ending general fund deficit balance of $(2.5) million. Medical School leadership acknowledges that the current funding model does not effectively support the basic science departments. These departments lack income streams available to other Medical School departments, such as a clinical income and significant research funding. Medical School leadership is currently developing a sustainable financial model for its basic science departments.

President Schlissel has recently created a President's Advisory Panel on the Biosciences and has charged the panel with developing a strategy recommendation that will propel Michigan to the forefront in critical areas of life science research. The provost is leading the panel. This advisory panel may significantly impact the future and organization of the basic science departments, not only at the Medical School, but departments in other schools and institutes at U-M as well.

3. Audit Scope and Identified Risks

The table below lists the key activities audited, along with the overall risks of the audit issues identified for each sub-activity. The scope of the audit was determined based on an assessment of the risks associated with the activities of the Department of Pharmacology. This process included input from pharmacology management and Medical School leadership.

Sub-activities Audited	Key Activities Audited				
	Fiscal Responsibilities	**Grant Management**	**Conflict of Interest/Conflict of Commitment**	**Recharge Services**	**Faculty Appointments**
	Gap analysis and internal control certification	Financial oversight	Disclosure of conflicts	Approval of rates	Joint appointments
	Financial monitoring and oversight	Federal spending requirements	Compliance Hotline	Adequacy of rates (issue 2)	Research classification pay
	Cash handling and procurement controls	Effort reporting			Time in rank for research classifications
	Statement of Activity (SOA) reconciliation	Cost transfers			Job descriptions and evaluations
	Tuition revenue allocation	Subcontract management			Timekeeping and payroll
	Policies and procedures	Safety inspection results			
	Asset management	Lab training for summer programs			
	Security of sensitive data (issue 1)				
	Continuity of operations				

Legend: Overall risk conclusion for each sub-activity		
High Risk	**Medium Risk**	**No Issues Reported**

The audit focused on administrative and business operations. The following areas were not part of the scope of this audit:

- Research compliance areas such as bio-safety, human subjects, animal use, and controlled substances that are managed and monitored by other institutional compliance organizations
- Intellectual property and royalty revenues managed centrally by the Office of Technology Transfer

- Instructional faculty recruitment, evaluation, and tenure
- Graduate student admissions and academic matters
- Facilities, including key and building access managed centrally within the Medical School.

4. Audit Objectives

This audit was conducted at the request of the Dean of the Medical School due to recent leadership transitions. The objectives of this audit were to:

- Assess the department's policies, procedures, and control environment associated with fiscal responsibilities.
- Assess the department's grant management for compliance with university and sponsor requirements.
- Evaluate compliance with conflict of interest/conflict of commitment policy.
- Determine whether recharge rates are appropriately managed.
- Evaluate management of joint appointments and research classifications.
- Evaluate timekeeping, payroll, and employment process to determine whether they are effectively managed and in compliance with university policy.
- Assess process for physical and data asset management.
- Validate that corrective action recommendations during lab inspections were addressed.

B. Audit Issues and Management Action Plans

This section of the report provides details of the high- and medium- risk issues identified during the audit. See Appendix 1 for risk definitions.

1. Sensitive Institutional Data	High

Issue: The department has not conducted a risk assessment around its sensitive institutional data to mitigate or correct any potential weaknesses or vulnerabilities.

Risk: Sensitive research data may not be adequately protected and could be compromised, lost, or misused.

Support: The department engages in biomedical research that falls under the Information and Technology Service's classification of sensitive institutional data. The department knows that animal research is sensitive data but did not realize that it should be protected and risk assessed like patient health information. The department's research data is primarily stored on hard drives that are backed up on Medical School Informational Services (MSIS) supported servers.

University policy states that data will typically be classified as sensitive if any of the following are true:

- Unauthorized disclosure may have serious adverse effects on the university's reputation, resources, services, or on individuals
- It is protected under federal or state regulations
- There are proprietary, ethical, or privacy considerations

1. Sensitive Institutional Data	High

The U-M Information Security Policy (Standard Practice Guide Section 601.27) requires each university unit to periodically conduct risk assessments around its sensitive information assets. Risk assessments, such as a Risk Evaluation of Computers and Open Networks (RECON), are part of the ongoing information technology security risk management at U-M. The risk assessment will prioritize risks and recommend appropriate mitigation strategies.

Recommendation: Management should conduct a risk assessment on department systems, activities, and functions as it relates to sensitive informational assets. MSIS or Information and Infrastructure Assurance can provide guidance.

Management Action Plan: Pharmacology will contact MSIS to conduct a risk assessment of its research data to ensure that it is adequately protected and that controls are in place to prevent research data from being compromised, lost, or misused.

Action Plan Owner: Department administrator

Expected Completion Date: October 2015

2. Recharge Activity	Medium

Issue: The department cost allocation methodology for the Biomedical Mass Spectrometry Facility (facility) uses unrealistic forecasting to set recharge rates. The department does not have sufficient research volume or funds to support the teaching and training use of the facility.

Risk: Potential noncompliance with university and federal cost accounting requirements can lead to disallowances. The department may not recover all allowable costs, using department funds to cover the deficit that could be used for other priorities. The department may be undercharging sponsored projects.

Support:

- Pharmacology manages a mass spectrometry facility that specializes in drug analysis. Mass spectrometry is an analytical chemistry technique that helps identify the chemical make-up of a sample. The facility is used for research and academic purposes by over twenty biomedical departments in the Medical School, College of Pharmacy, School of Dentistry, and College of Literature, Sciences and the Arts (LSA). The facility also serves some external entities.
- The facility is set up as a recharge unit to comply with university and federal cost accounting standards. A recharge is a charge for goods or services provided by one internal university unit to another internal university unit. The Office of Financial Analysis has internal procedures to review and approve recharge rates every two years.
- Due to a decline in research funding and other available mass spectrometry facilities in the university, the facility has operated at a reduced volume that cannot support the unit

2. Recharge Activity	Medium

without subsidies. The last date of review and approval of rates by the Office of Financial Analysis was May 2012. The rates were approved with the understanding that the research volume did not fully cover the operating cost of the facility and that pharmacology would supplement the difference.

- The rates expired in May 2014 and the department requested an extension to give the interim chair time to assess the on-going viability. Due to lack of progress in resolving the funding model and updating the rates, the rates were inactivated in November 2014. Pharmacology continues to use the facility and incur costs but cannot bill for any services provided to units outside the department. As of March 31, 2015, the unit accumulated a deficit of ($378,323).

Recommendation: Work with the Medical School to assess the business case for the facility and whether a mixed funding model of subsidy and recharge rates is viable. Update the recharge and external rates with the Office of Financial Analysis and Tax Compliance and Planning.

Management Action Plan: Pharmacology is currently working with the College of Engineering and LSA (Department of Chemistry) to establish a Shimadzu Center of Excellence that would include our mass spectrometry facility. If these negotiations are successful, involvement in the center will completely change our core structure and funding model. We will be meeting with the senior associate dean of research in May to explore the possibility of Medical School support for establishment of this Center of Excellence. The interim chair of pharmacology will provide a report on the progress of these negotiations.

Action Plan Owner: Interim chair of pharmacology

Expected Completion Date: September 2015

Medical School Department of Surgery Division of Anatomical Sciences 2015-209

Report issued April 2014

A. Executive Summary

1. Overall Conclusion

The control environment in the Division of Anatomical Sciences (DAS) is lax and has suffered from minimal oversight. The weak control environment is partially due to frequent changes in DAS leadership and their reporting line. Inventory management and recordkeeping require serious and thoughtful attention to comply with a federal requirement to track anatomical donations. Employees have struggled with an ineffective and inefficient database that has resulted in recordkeeping errors. Plastinated specimens were loaned to external institutions with no oversight processes in place. The efforts of current staff to make improvements in the department's processes have been hindered by historic problems that have proven to be difficult to address.

The Department of Surgery, which became responsible for DAS as of July 1, 2014, has committed the necessary time and resources to address these concerns moving forward. Surgery's attention and resources have already made improvements in DAS. University Audits noted that DAS faculty, staff, and students displayed a deep respect for the generosity of donors and showed compassion in their interactions with families and potential donors.

2. Context and Key Risk Considerations

The reporting line for DAS changed from the Department of Learning and Health Sciences (formerly the Department of Medical Education) to the Department of Surgery as of July 1, 2014. This is the third reporting change for DAS in the last 10 years. Prior to August 2014, DAS was made up of three units: the Anatomical Donations Program (ADP), which manages anatomical gifts of bodies after death; the Plastination Lab, which preserves some specimens for long-term study; and the Gross Anatomy academic courses.

Donations received through the ADP are critical for medical education and research. Arrangements are in place so bodies can be accepted at any time of the day, any day of the week. Both cadavers and plastinated specimens may be loaned to external organizations for medical education. When this occurs, ADP charges a fee to cover the costs of preparing both cadavers and plastinated specimens. Cadavers, whole or in part, remain ADP's responsibility and must be returned to the ADP at the conclusion of study. The majority of donations are received with the stipulation that the whole body is cremated after 18 months and either returned to the family or buried at a U-M memorial plot.

Plastination is the process of replacing water and fat in anatomical specimens with plastic, yielding specimens that do not smell or decay and are preserved for long-term study. While whole bodies can be plastinated, the process was used most often on internal organs or individual limbs. Effective August 2014, prior to the start of this audit, Surgery elected to close DAS's Plastination Lab due to concerns about financial stability and a lack of ongoing need.

There are seven Lecturer's Employee Organization employees (LEOs) in DAS who use cadavers from the ADP to teach medical students as well as students in the Dental School and the College of Literature, Science, and the Arts. The LEOs in DAS are the largest concentration of lecturers in the Medical School.

Both the positions of director of DAS and director of the ADP were vacant for the majority of this audit, but have recently been filled. The LEOs report directly to the Chair of Surgery. During the audit, DAS filled a new position for an office manager to provide administrative support and oversight. Previously, a similar role was housed in the Department of Medical Education.

There is a State of Michigan statute governing anatomical donations, the Revised Uniform Anatomical Gift Law (RUAGL). RUAGL governs the anatomical gift process in the following ways:

- Prescribes the forms required to document the gift
- Indicates who, other than the deceased, may authorize the gift
- Limits the liability of health care providers who act in good faith representations that a deceased individual intended such a gift
- Prohibits trafficking in human organs or bodies for profit
- Outlines the rights and duties of organizations that participate in anatomical gift programs

3. Audit Scope and Identified Risks

The table below lists the key activities audited, along with the overall risks of the audit issues identified for each sub-activity. The scope of the audit was determined based on an assessment of the risks associated with the activities of DAS. This process included input from the Department of Surgery and other key stakeholders.

	Key Activities Audited			
Sub-activities Audited	**Management of Anatomical Specimens**	**Receiving Anatomical Donations**	**Disposal of Anatomical Specimens**	**Recharge Activity and External Billing**
	Anatomical gift laws and other regulations	**Acceptance criteria**	**Donor intent**	**Consistency and accuracy of billing (Issue 6)**
	Reconciling anatomical specimens (Issue 1)	**Coordination with morgue and funeral homes**	**Documentation**	**Approval of rates and services (Issue 3)**
	Documenting and tracking specimens (Issue 1)	**Receiving process**	**Safe handling**	**Invoicing (issue 4)**
	Storage and maintenance	**Documentation and permits**	**Cremation process**	**Managing accounts receivable**
	Oversight of loans (Issue 3)	**Handling and care**		**Policies and procedures (Issue 7)**
	Legal coordination (Issue 8)	**Policies and procedures (Issue 7)**		

Sub-activities Audited	Key Activities Audited				
	Information Technology	Financial Monitoring	Lab Safety and Access	Employment and Payroll	Purchasing
	Inventory records (Issue 1)	Oversight	Security	Credentials and certifications	Internal and external agreements (Issue 9)
	IT resources (Issue 2)	Budgeting	Access authorization and revocation	Payroll	Concur expense processing
	Database efficiency and effectiveness (Issue 2)	Tuition revenue distribution	Shutdown of Plastination Lab	LEO oversight	Purchasing procedures
	Data security (Issue 5)	Asset management	Attention to OSEH observations	Conflicts of interest and commitment	
	Website accuracy		Alarms and sensors	Reporting compliance concerns (Issue 6)	

Legend: Overall risk conclusion for each sub-activity		
High Risk	Medium Risk	No Issues Reported

4. Audit Objectives

The objectives of this audit were to:

- Verify that processes to receive, handle, and dispose of anatomical donations are conducted in a safe and coordinated manner that complies with donor intent, enables appropriate and respectful treatment of donations, and generally complies with RUAGL.
- Determine whether recharge activity and external billing is appropriately managed.
- Determine whether electronic data is secure and that sensitive data is managed appropriately.
- Determine whether financial oversight is effective to ensure appropriate use of university resources.
- Evaluate physical security of DAS space, particularly highly sensitive areas.
- Assess whether lab procedures are sufficient to ensure the safety of DAS employees and the working condition of DAS equipment.
- Evaluate timekeeping, payroll, and employment processes to determine whether they are effectively managed and compliant with university policies.
- Determine whether purchasing controls are sufficient so that transactions are business appropriate and made in accordance with university purchasing guidelines.

B. Audit Issues and Management Action Plans

This section of the report provides details of the high and medium risk issues identified during the audit. See Appendix 1 for risk definitions.

1. Inventory Management and Recordkeeping — High

Issue: Inventory records of anatomical specimens are inaccurate or incomplete.

Risk: Non-compliance with RUAGL could lead to fines and penalties or damage to the university's reputation. Poorly documented records increase the risk that materials may be mislabeled, misplaced, or lost. Lax inventory controls in other academic institutions have resulted in inappropriate or unauthorized use that led to fines, imprisonment, negative media attention, and, in some cases, closure of anatomical donations programs.

Support:

- Inventory records are incomplete and duplicative across multiple tracking mechanisms, such as different databases or spreadsheets. These include fetal specimens, plastinated specimens, and fresh/frozen/embalmed specimens.
    - Records for plastinated specimens were often incomplete, missing, or inaccurate. For example, one whole plastinated body was incorrectly labeled. DAS has already started researching these records. However, historically poor recordkeeping, a misunderstanding of how cremations were recorded, and inconsistency in recordkeeping due to changing protocols has made this a much more difficult task than anticipated.
- There are approximately 200 boxes of full skeletons and an additional 125 skulls used mainly for student self-study. Students are permitted to checkout a box for study off-site, and are expected to return the box at the conclusion of their study. An inventory of the bones and skulls has never been performed. Further, checkout records are not maintained to confirm that all boxes are returned.
- Most records for fresh/frozen/embalmed specimens are maintained in the Anatomical Donations Database. Available specimens are viewable through a report in the database. This report is not regularly reviewed, and there is no other method to reconcile between records in the database and specimens on hand to verify that records are accurate.
- At the time of testing, twelve specimens listed as available in the database had already been cremated or plastinated.
- Paper donor documentation files were not well grouped or organized, and electronic backup records were often incomplete or missing.
- Embalmed/unembalmed and reused categories are not documented consistently in the database. This can create billing errors as charges are calculated from the database.

Recommendation: Perform a regularly scheduled (e.g., monthly) inventory reconciliation by using available reports from the database. The status and availability of specimens should be researched and updated when found to be inaccurate. Every reconciliation should include the

1. Inventory Management and Recordkeeping	High

most commonly used specimens (e.g., whole body, head). Consider staggering the reconciliation of the remaining specimens so that a reconciliation of all specimens is performed on an annual or semi-annual basis. Stress the importance of accurate record keeping with all staff and faculty, and document proper recordkeeping procedures for training purposes. Develop processes whereby errors can be identified and promptly resolved and paperwork is effectively organized and maintained. Completely document all specimens and maintain accurate records. Reassess process to store future donor records.

Management Action Plan:

- We will assign curator roles to two faculty to facilitate ownership of responsibilities and distribution of workload.
- We have developed an Anatomical Donations Program committee, consisting of the director of DAS as the committee lead, the director of the ADP, the two faculty curators, as well as a representative from Surgery. This group will be tasked with reviewing issues and making decisions on activities involving the ADP and Plastination inventory.
- A process has been developed and is being implemented for the retagging of all specimens and will begin with the in-house plastinated specimens. The process will be documented. Retagging will serve as a new inventory of the complete collection in DAS. The timelines estimated for completion of this project are included below.
- A physical inventory of available specimens in the ADP morgue will be compared to the database monthly. More discussions will occur to determine process details and documentation.
- Naming logic and specimen definitions standards have been developed and will be used moving forward for new specimens as well as retagging current specimens. Documentation has already been created for this process.
- Internal specimen loan and check-in and check-out processes will be developed and documented for all specimen loans.
- The existing paper donor documentation will be consistently filed, completed, and entered in an organized, secure manner (see issue 5). Plans to electronically image all donor documentation in the future is being considered. The business manager will audit a random sample of donor documentation on a quarterly basis.

Action Plan Owners: DAS Curators, with consultation and guidance from the newly developed committee

Expected Completion Date:

- The DAS Curators were officially announced in March 2015.
- Standardized naming logic and specimen definitions have already been developed.
- Reconciliation process has already begun.
- Internal loan and check-in and check-out policy will be developed by April 2015.
- The procedure for the labeling and retagging process will be finalized by May 2015.

1. Inventory Management and Recordkeeping	High

- New standards for donor documentation will be decided by April 2015 and quarterly review will be conducted starting in June 2015.
- Completing the labeling and retagging process will be completed by April 2016.

2. Anatomical Donations Database	High

Issue: The Anatomical Donations Database lacks the capability to maintain accurate records of specimens and donor information. Resources are not sufficiently prioritized for routine maintenance, ongoing needs, or necessary upgrades.

Risk: Records may be corrupt, inaccessible, or modified/deleted by unauthorized individuals without detection. The university may not be able to effectively demonstrate compliance with RUAGL and other federal laws. Staff time may be spent on inefficient or duplicative processes due to database limitations or lack of confidence in data integrity.

Support:
Resource Limitations

- The database was developed and implemented in 1982. Medical School Information Services (MSIS), who built and now supports the database, currently ranks this as a "tolerated" system, which means it is not scheduled to receive significant funding or resources for updates.
- ADP procured a barcode printer and scanner in 2002 to interface with the database and read tags assigned to each donor. The database has never been updated to enable use of the scanner, so all records are still manually keyed.

System Limitations

- The ADP Program Coordinator can adjust recharge rates for internal or external users at any time without secondary review or approval.
- There are no system flags to alert staff to data errors, such as duplicate donor records, missing birth dates, or date of birth equaling date of death.
- Reporting is limited. There is no efficient way to obtain statistics for monitoring or analysis of trends, such as number of donors or number of bodies received between two dates.
- There is no read-only access for the database. Any user of the system has the ability to modify donor or specimen records.
- There is no audit log in the database to document changes to fields. Only the user who makes the most recent change to a field is recorded; previous user activities are overwritten.
- The database fields for body parts are limited and do not allow users to input necessary detailed information. For example, the body part may be labeled "knee," but there is no place to indicate if the cut was above or below the knee, left or right, or other identifying data. To compensate for this, the database houses many variations of specimen names.

2. Anatomical Donations Database	High

- The database lacks the ability to systematically track multiple subsections of a part (e.g., 5 slices showing multiple components of a heart) or plastinated specimens. As a result, plastinated specimens are recorded in a separate system with no link or cross-reference to the original record.

Efficiency

- The database houses many outdated rates. Historical rates were included to avoid overwriting old invoices that had already been processed; however, the amount that has accumulated is overwhelming and can be confusing for a user.
- The current fields are not consistently used. Specifically, the status of a body/part is not always updated to reflect the part's availability. This makes the few available query tools unreliable.
- Although the database contains mailing information for potential donors, the system cannot automatically populate mailings. Invitations to the annual memorial service or thank-you letters must be done individually.

Recommendation: Work with MSIS to develop short and long-term action plans to address the functionality and security of the database and allow the university to efficiently demonstrate compliance with RUAGL. Ensure plans allow for sufficient resources for ongoing maintenance and future upgrade needs. Considering the extent of updates necessary, evaluate the time and cost of implementing the many necessary and desired upgrades to the existing database versus procuring an existing third-party product or an external firm to develop a new database. Consider current technology solutions for specimen tracking, such as radio-frequency identification (RFID), if the existing barcode scanner is no longer technologically favorable.

Management Action Plan: We will work with MSIS to develop short and long-term plans and determine if a new system would be better suited to address audit and compliance concerns and so that all inventories (Anatomical Donations, plastinated, osteological, teaching specimens, fetal, etc.) can be tracked in the same system. Long-term maintenance and support needs will be considered. We will contact similar programs at other institutions for consultation and benchmarking. Current technology solutions for specimen tracking will be investigated.

Action Plan Owner: Anatomical Donations Program Committee

Expected Completion Date: Decision on future of database by May 2015

3. Management of Specimen Loans	High

Issue: Specimen loans are not tracked effectively and there is no process to ensure outstanding loans are returned.

Risk: Federal and state law assign ultimate oversight responsibility of donated cadavers to the original custodian. Ineffective management of specimens on loan could result in fines and penalties or damage to the university's reputation.

3. Management of Specimen Loans	High

Support:

- Historically, there was no process to follow-up on loaned specimens (cadavers or plastinated specimens) to confirm that records for possession and location are accurate.
- Plastinated specimens are typically on loan for longer than five years due to their preservation for long-term study.
- Prior to the start of the audit, DAS had begun an effort to contact institutions holding loaned, plastinated specimens to verify their location. The response rate from the outside institutions has been minimal. These efforts are further complicated because there is no official book of record for plastinated specimens. Different sources are being used in attempts to identify the disposition of plastinated specimens.
- There is little documentation tracking the return of loans.
    - Specimens may be returned via courier to the ADP and are brought to the ADP dock. The returns of specimens are tracked in a logbook maintained in the office space, and at times, staff forget to document and sign off on the returned specimens.
    - Borrowers do not sign off on the return of specimens that are returned in person to ADP. This is particularly problematic when only a portion of a loaned collection is returned.

Recommendation: Develop a robust tracking process for loaned specimens, including a method to verify the location and possession of loaned specimens periodically, particularly those that are or will be on loan for extended periods. Consider a confirmation with loan custodians on an annual or bi-annual basis and update loan records when necessary. Develop a process for situations when the location of specimens cannot be verified during the annual or bi-annual confirmation, and include guidance from the Office of General Counsel and the Office of Regulatory Affairs. For specimens returned at the dock, maintain specimen allocation logs at the dock or bring the logs to the dock for every returned loan. Loan custodians should sign off that loans were returned or initial next to individual specimens when the entire loan is not returned.

Management Action Plan: All plastinated specimens will be properly cataloged in the database with pertinent information. We will document processes for maintaining updated information for outstanding external loans, and work to incorporate processes to document contact within the database. Current contracts with external institutions may need to be updated to clarify contractual conditions and will be updated when necessary. We will consult with the Office of the General Counsel (OGC) on the contract language. The Division hired two individuals with experience as employees in the DAS to focus on the external U-M plastinated specimen inventory and updating external contracts. The loan return process will be evaluated to ensure accurate information is captured timely.

Action Plan Owner: DAS Curators

3. Management of Specimen Loans	High

Expected Completion Date: The loan process will be finalized by April 2015. The plastinated specimens on loan will be cataloged and contracts updated if necessary by December 2015. A process to capture loan information and periodic loan confirmations will be implemented as part of the database redesign (see issue two).

4. Recharge and Rebill Services	Medium

Issue: DAS is using some recharge rates that have not been reviewed or approved by the Office of Financial Analysis (OFA). Additionally, some rates are outdated or are not comprised of appropriate costs.

Risk: DAS may not recover all allowable costs, which could lead to a budget deficit. Research projects could be charged unallowable costs, leading to disallowance of funds.

Support:

- Services provided on recent invoices were matched to service rates on the OFA-approved recharge letter. Twenty-seven specimen rates that are included in the database were not included on the recharge letter. The rate for two specimens did not match between the approved rate per the recharge letter and the applied rate in the database.
- Some services and supplies, such as room rental and labor, are rebilled although they should be treated as recharges and approved by OFA. In some cases, these prices do not reflect the actual cost. Some rates used are from 1996 and do not reflect actual costs.
- Discounts may apply to anatomical specimens that have been reused or if the requester does their own harvesting, but these discounted amounts have not been reviewed and approved by OFA.
- Some of the labeling and naming for the specimen descriptions are different between the database and the OFA recharge letter, making it difficult to verify that rates used were approved.
- Activities outside of the ADP were included in the ADP recharge account. Surgery immediately corrected this issue when made aware during the audit.

Recommendation: Work with OFA and Surgery to evaluate all recharge services. Include the Tax Office for rates charged externally. Verify that all services provided or discounts offered to internal or external customers are documented and approved in the recharge letter and uploaded accurately to the database. Ensure rebills represent a true pass-through of exact costs of materials or services. Periodically review recharge cost centers to ensure assigned activities are appropriate and complete.

Management Action Plan:

- We will explore programming whereby the database will not allow a user to select a rate that has not been approved by OFA.

4. Recharge and Rebill Services	Medium

- Rebill activity and other exceptions will be reviewed. Any activity deemed to be appropriate as recharge will be sent to OFA for approval. We will include the Tax Office for external rates.
- Description and rates last approved by OFA will be reconciled to the database and updated. These items will be noted or flagged in some manner to note that these are the only rates allowed. We will work with MSIS to determine if they can make this fix in the database.

Action Plan Owners: Surgery Financial Director, DAS Office Manager

Expected Completion Date: June 2015

5. Security of Sensitive Data	Medium

Issue: Sensitive donor information, including social security numbers (SSNs) and paper or electronic protected health information (PHI and ePHI), are not adequately secured.

Risk: Sensitive information may be easily accessible by unauthorized individuals. Penalties or potential legal costs could result from a privacy breach.

Support:

- Donor files, including death certificates, are maintained for some donors in an unlocked file cabinet in the DAS office suite. SSNs are present on all death certificates. The period shortly after death has an increased risk for identity theft.
- Xythos, the database that currently stores electronic copies of donor documentation, including medical records, should never be used to store ePHI or Sensitive Regulated Data according to MSIS. Although management was aware that ePHI was in Xythos, it was allowed for temporary use as the creation of a new database that was approved to store this information was underway. However, the new database project has since been discontinued.

Recommendation: Safeguard paper donor files in a locked file cabinet accessible only to authorized individuals. Consider redacting SSN's when death certificates are received if there is no business purpose to maintain this data. Alternatively, move all paper files to secure electronic copies and destroy existing paper files. Ensure any electronic database used to store donor files is approved to store sensitive data. See issue two for related discussion.

Management Action Plan:

- We agree PHI data should be safeguarded and secured in locked cabinets. Access will be limited.
- We will consult OGC for guidance on record retention policies.
- For SSNs currently stored electronically on Xythos, we will work with MSIS to get these records moved to a secure database.

5. Security of Sensitive Data	Medium

Action Plan Owners: Surgery Financial Director, DAS Office Manager

Expected Completion Date: Access to paper PHI data has been restricted. ePHI data will be moved to secured storage by June 2015.

6. Escalating Non-Compliance or Other Concerns	Medium

Issue: DAS employees observing inappropriate or questionable activities did not address or report these concerns.

Risk: Non-compliance with established policies could weaken the control environment and may cause inappropriate activity. Management may not be aware of non-compliance to provide additional accountability and enforcement.

Support:

- Staff who felt specimens were being inappropriately plastinated or not effectively tracked did not report the activities.
- Tours are not permitted in the Anatomy Labs, yet multiple instances of tours being arranged were observed by or described to audit staff.
- Staff observed discrepancies when a prior scanning project performed by Imaging Services did not return complete electronic records. The issue was not escalated.
- The program coordinator could not verify the disposition of a specimen in 2002. After an initial inquiry to faculty was unsuccessful, the issue was never further researched or escalated. After discovery during this audit (because the specimen appeared to be currently available), ADP researched further and attests that they have resolved the discrepancy and updated donor documentation.
- Employees, both faculty and staff, could identify multiple reporting methods available but did not address their existing concerns with higher authorities.

Employees most often expressed their desire to maintain a positive work environment with their colleagues as the reason for not escalating their concerns.

Recommendation: To be compliant with the UMHS Code of Conduct Attestation, DAS employees must report concerns related to non-compliance or unethical practices. Surgery should continue to stress the ethical responsibilities and importance of all activities associated with ADP during regular and recurring discussions. Remind all DAS employees, faculty, and staff of the multiple reporting methods available, including anonymous options such as the Compliance Hotline, and reinforce a non-retaliatory environment. Surgery should continue developing a relationship with DAS that makes employees comfortable bringing forward concerns and reinforces their requirement to do so under the UMHS Code of Conduct.

6. Escalating Non-Compliance or Other Concerns	Medium

Management Action Plan:

- As divisional policies and procedures are documented, these will be reviewed at the monthly faculty and staff meeting to obtain agreement and understanding of what is allowed and not allowed. These policies will include procurement procedures, payroll/timekeeping, tours of lab, inventory, and loan processes.
- Emphasis will be placed on "no exceptions" unless approved by designated individuals, and if someone observes activity that goes against policy, it should be reported to leadership or through compliance resources.
- Communication regarding compliance will be discussed at March faculty/staff meeting, and UMHS Code of Conduct Attestation will be signed by all employees.

Action Plan Owner: Director of Division of Anatomical Sciences

Expected Completion Date: June 2015

7. Documented Policies and Procedures	Medium

Issue: Some policies or procedures that are documented are not updated or shared with staff. Many policies and procedures are not documented.

Risk: Undocumented or unknown policies may result in inconsistently performed work, could make it more difficult to hold individuals accountable, and may hinder effective continuity of operations.

Support: Some procedures are documented in a Protocol Manual. Not all key procedures are documented here, and the manual has not been updated since 2011. Further, most staff were unaware of the manual. Based on our testing, the following key policies are not documented:

- Tours are not allowed in the ADP.
- Unclaimed bodies are not accepted in the program.
- Exception and approval process for providing specimens at no cost.
- Protocol when a specimen is found to be missing.
- Specimen loans are not offered internationally.
- Process when personal belongings are received along with a body.
- Rates charged are based on rates established on the day the request is made and not the day the request is filled. We noted an instance where a rate was calculated using the incorrect date.

Recommendation: Determine which procedures are essential to the organization, document them in a comprehensive manual, and share the manual with staff and faculty. Review the manual on an annual basis and update it when needed. Share this manual with staff and faculty regularly and as part of orientation. To be effective, management needs to develop a process to monitor compliance with DAS policies.

7. Documented Policies and Procedures	Medium

Management Action Plan:

- We will create policies on the above processes by the end of July 2015.
- Specimens will not be provided at no cost in the future.
- We will not provide any specimens internationally in the future.

Action Plan Owners: Surgery Financial Director, DAS Office Manager

Expected Completion Date: July 2015

8. Updating and Approving Legal Agreements and Forms	Medium

Issue: There is not a consistent process to review and update the legal forms or other documents used in ADP.

Risk: Documents may not reflect current laws or regulations. Borrowers may not be aware of important U-M policies and requirements to manage anatomical donations effectively.

Support: Legal agreements and forms were found to be lacking in the following key ways:

- The User Agreement form does not clarify that federal regulations prohibit "ownership" of the body by any institution.
- There is a no consistent coordination with OGC. An administrative specialist in the Department of Learning Health Sciences provided legal advice on some agreements, but her position is not authorized to provide such guidance.
- The Agreement for Use form does not provide direction on safe and proper storage of specimens.
- The Agreement for Use form prohibits pictures, recordings, and videos of donors, but only in U-M facilities.
- There is no method to demonstrate that changes to legal documents were reviewed and approved at appropriate levels.

Recommendation: Develop a schedule for regular review of forms and other materials to account for changes in process, arising issues, or other necessary modifications. Coordinate with OGC to include changes in laws or regulations. Track updates in a change log to indicate the change made, approver, date, and other relevant information. Update agreement form to include guidance on storage of specimens and clarify that all parts of the agreement apply to all facilities. Clarify that bodies are not owned by any institution and that ADP, as the original custodian, must be notified for any changes in use, location, or secondary custodian of the specimens.

8. Updating and Approving Legal Agreements and Forms	Medium

Management Action Plan:

- All forms used by DAS/ADP will be identified and saved centrally.
- Business manager will maintain and coordinate annual reviews of the forms and document any changes.
- Legal forms will be reviewed by OGC, space related forms by Facilities, and research compliance forms by the UMMS Office of Regulatory Affairs.

Action Plan Owner: DAS Office Manager

Expected Completion Date: August 2015

9. Documented Agreements	Medium

Issue: There is not a documented service level agreement between ADP and the Hospital Morgue or Gift of Life.

Risk: Agreements that are not documented or are not approved by authorized individuals may jeopardize the quality and continuity of services provided. Leadership may be bound by unknown commitments.

Support: ADP cremates specimens and samples for the hospital in exchange for use of the Hospital Morgue outside of business hours. ADP also cremates specimens from Gift of Life Michigan, an organ and tissue donation organization, for community benefit. Neither agreement is documented.

Recommendation: Develop formal agreements that are approved at appropriate university levels so that both sides are aware of their ongoing obligations and responsibilities. For the agreement with Gift of Life Michigan, verify appropriate signature authority per Standard Practice Guide 601.24, *Delegation of Authority to Bind the University to External Agreements on Business and Financial Matters.* Provide OGC with a draft version of the external agreement for their review and input. All final agreements should be reviewed and updated on a regularly scheduled basis.

Management Action Plan:

- Agreements or MOUs will be established with the Hospital Morgue and Gift of Life, and reviewed by necessary parties by October 2015.

Action Plan Owner: Surgery Financial Director

Expected Completion Date: October 2015

Museum of Anthropological Archaeology 2015-209

Report issued April 2014

A. Executive Summary

1. Overall Conclusion

Faculty and staff of the museum do not work well together, which has negatively impacted management of the museum's collections. Given the importance of the collections to the museum's teaching and research mission, accurate and complete collections records need to be a priority. Approximately two-thirds of the 3.5 million objects in the collections have not been recorded in the inventory management database. In addition, some of the collections have not been fully accessioned. While accession paper records may exist for collections that have not been recorded electronically, it does not constitute an inventory management process. The current state of the collections, including the storage conditions and the security of collections, puts U-M owned property at risk. The museum is moving into new space on Varsity Drive and transitioning to a unified inventory management system in 2015, which should help address these concerns.

Given the volume of the collections, the museum's responsibility to comply with the Native American Graves Protection and Repatriation Act (NAGPRA) regulations and the current state of the inventories, resources devoted to collections management may not be adequate. The museum has one collections manager, compared to the Kelsey Museum of Archaeology, which employs two collections managers for approximately 100,000 objects. Important administrative responsibilities may not be assigned or prioritized effectively (e.g., OSEH compliance, travel oversight) and in some cases, duplication of effort exists with work transitioned to the College of Literature, Science, and the Arts (LSA) shared services, but still performed by the museum.

The working environment also affects the museum's daily operations, lowers employee morale, and may be the cause of some of the other issues in this report including protection of the museum and university while conducting international research and compliance with university requirements. Lack of cooperation among the employees is a long-standing cultural condition that needs joint actions of both museum and LSA leadership to resolve. When University Audits conducts a follow-up on the issues noted in this report, we will review the progress made in addressing these climate concerns and look for improvement in internal culture and communication. The museum staff and faculty were receptive during the course of the audit, and saw the upcoming changes to the Museum environment as a suitable time for addressing corrective actions.

The LSA dean's office shares the concerns raised by the auditors about the working climate in the museum and its impact on operations and morale. They would like to see a written summary of specific efforts the museum faculty leadership plans to make to improve their group culture and they expect the museum to make serious and sustained effort to address these issues. The LSA dean's office will be looking for significant improvements in culture and communications at the time of the University Audits' follow-up review. Additionally, the LSA dean's office expects the museum to produce a set of written standard operating procedures and policy changes to address the concerns raised in this audit with a deadline for these to be reviewed by the dean's office by July 2015.

2. Context and Key Risk Considerations

The Museum of Anthropological Archaeology was founded in 1922 and is one of the departments in LSA. Today, the museum's collections include more than three million archaeological and ethnographic artifacts, comparative specimens, and associated documentation derived from more than a century of scientific research conducted across the globe. The museum's curators, research staff, and associated graduate and undergraduate students conduct archaeological research in North America, Latin America, Europe, the Middle East, Asia, and Africa.

The museum, in conjunction with the U-M Office of Research (UMOR) is working to comply with the provisions of the Native American Graves Protection and Repatriation Act. NAGPRA is a United States federal law enacted on November 16, 1990. The Act requires federal agencies and institutions that receive federal funding to return Native American "cultural items" to lineal descendants and culturally affiliated Indian tribes and native Hawaiian organizations. Cultural items include human remains, funerary objects, sacred objects, and objects of cultural patrimony. The museum submitted inventory summaries to the National Park Service (NPS) and tribal groups and continues to work with the tribes throughout the United States in consultations and repatriation activities. During this inventory process, the museum identified over 250 collections with NAGPRA related materials. These included 15 archaeological sites containing human remains and associated funerary objects that could be culturally affiliated with a federally recognized tribe. Additionally, the museum identified more than 300 items in its ethnology and ethnobotanical collections that are believed to represent either sacred items or objects of cultural patrimony. In all these cases, culturally affiliated tribes and native Hawaiian organizations have been notified. One full-time staff member from the museum is fully designated to the NAGPRA compliance project. This staff member works directly with a NAGPRA project manager from UMOR and is assisted by a group of students who are available for one or two terms at a time. The concern regarding the retention of knowledge specific to NAGPRA has been expressed several times during the audit and linked to the delay in project completion.

In an effort to improve the university's current approach when addressing the requirements of the NAGPRA provisions, LSA initiated an external review of the NAGPRA compliance process and invited two subject matter experts from outside organizations (American Museum of Natural History in New York and University of North Carolina). The review took place in December 2014. The goal was to obtain their expert opinion on a more effective facilitation of the NAGPRA project. Results of the review are expected to be communicated in 2015.

The museum has funding from LSA for five Graduate Student Research Assistants (GSRAs). Historically, the museum had four to six GSRAs per term; however, starting in 2013, this number has decreased to one to three GSRAs per term due to the decreasing interest in this field of study.

In 2013, the museum went through an academic external review, which was also initiated by LSA and is a standard review that many departments at the university undergo. The review was of both, the Department of Anthropology and Museum of Anthropological Archaeology. The review identified some findings specific to academics, including a faculty retention issue. Also as part of this review, and in response to concerns raised, LSA asked the ADVANCE Program group from U-M to conduct a climate survey of the museum. The survey addressed employees' views on the museum climate generally as well as many aspects of staff job satisfaction (including work conditions, relationship with supervisor, recognition, and museum communication). The survey results mirror information shared with the auditor of tense and difficult working relationships. The results of the survey were communicated to the museum and LSA, which LSA leadership later discussed with the museum Director. However, at the time of the audit no further action had been taken with the museum.

Since 2014, there have been several process changes to the museum's operations. Some of the administrative processes were transitioned to the LSA shared services (e.g., grant management, expense reporting, Statement of Activity (SOA) reconciliation, lump sum advances). The museum is participating in an LSA initiative to assess and select a unified collections management system to be used by all LSA museums. Currently, the museum's existing inventory resides on 11 separate databases and the reporting capabilities of these systems are poor. In 2015, the museum will be moving to a new space on Varsity Drive, where the majority of the collections will reside. The space at the Biological Science Building (BSB) that is scheduled to open in 2018 for fall classes will be used for teaching and will serve as a temporary location for some collections for the duration of the classes. The Museum of Natural History will also be located in BSB and will open in 2019. Currently, the collections are located in the Ruthven building, several rooms in the Campus Safety Services Building (CSSB), and a storage facility on North campus.

3. Audit Scope and Identified Risks

The table below lists the key activities audited, along with the overall risks of the audit issues identified for each sub-activity. The scope of the audit was determined based on an assessment of the risks associated with the activities of the Museum of Anthropological Archaeology. This process included input from LSA and museum management and staff as well as stakeholders from other university functions.

	Key Activities Audited					
	Regulatory Compliance Management	**Inventory Management**	**Museum Operations**	**Research Grants**	**Field Research**	**Safety and Security**
Sub-activities Audited	NAGPRA compliance efforts	Inventory management process (1)	Accession/ deaccession process	Grant management process	Expense reporting	Safety and security procedures (6)
	NAGPRA inventory management (1)	Inventory reconciliation (1)	Acquisition practices	Effort reporting	Expense report approver training	OSEH compliance management (4)
	Other regulatory requirements	Collection management project	Permits, shipping and handling (3)	Subcontract management	Lump sum advances	Use of hazardous materials
			Museum tours	Retroactive adjustments	Fieldwork planning – travel oversight (5)	Compliance Hotline
				Coordination with LSA shared services	Fieldwork planning - collaborative agreements (2)	

	Key Activities Audited		
	Relocation Logistics	**Conflict of Interest/ Commitment**	**Fiscal Responsibilities**
activities	Communication effectiveness	Conflict reporting process	Fiscal responsibilities

Legend: Overall risk conclusion for each sub-activity			
High Risk	**Medium Risk**	**No Issues Reported**	**Out of Scope**

4. Audit Objectives

The objectives of this audit were to:

- Verify that tools and expertise are in place to support the university's compliance with NAGPRA requirements

- Determine whether the processes for managing and tracking the museum inventory are adequate
- Determine whether the processes for the accessioning and deaccessioning of collection objects are in compliance with the museum's policy
- Evaluate the processes to manage permits and museum tours
- Validate compliance with university and sponsor requirements, including effectiveness of the controls for effort reporting
- Assess effectiveness of expense reporting controls and controls around lump sum advances
- Evaluate communication effectiveness associated with the upcoming relocation of the collections
- Evaluate compliance with university policy on management of conflicts of interest or commitment
- Evaluate the adequacy of procedures for securing the museum's collections and borrowed materials and keeping the environment safe for faculty and staff.

B. Audit Issues and Management Action Plans

This section of the report provides details of the high and medium risk issues identified during the audit. See Appendix 1 for risk definitions.

1. Management of Collections	High

Issue: The collections are poorly managed.

Risk: Valuable collections may be lost, stolen, or damaged without detection. The university may not comply with NAGPRA regulations.

Support: In the beginning of the audit, museum leadership self-reported that only one-third of the 3.5 million in collection objects have been inventoried and are in the inventory management systems. They also reported that a process to reconcile the inventories on a periodic basis did not exist. The intent of this review was to evaluate the state of the inventoried collections and determine its accuracy. The comparison of what is recorded to what is in the collections and the reverse showed the following:

- 14 of 38 tested objects were not found
- 2 of 4 missing objects from the ethnobotanical collection should have been included in the NAGPRA database, but were not
- 9 of 38 tested objects were not found at the locations specified in the records; however, per further verification of the internal records, correct locations were identified and the objects were eventually found
- A tested object found at the storage facilities was supposed to be at a location different from what was specified in the records
- A tested object was not in the database, as it was part of the collection that was not inventoried due to faculty member's personal preference

1. Management of Collections	High

- A tested object was not in the same quantity as indicated in the records (one instead of two)

In addition to the inventory reconciliation process deficiencies, we identified the following areas of concern:

- Several museum employees reported that some items could not be fully accessioned or inventoried due to faculty resistance, specifically their sense of personal ownership of the collections and a lack of collaboration.
- The museum currently uses the LSA's faculty resignation checklist. The checklist is not customized to the processes specific to the museum operations (e.g., loaning/borrowing objects). Specifically, faculty are not required to formally follow-up on the objects loaned to or from other institutions.
- During the review of the storage facility on North Campus, it was observed that the collections are maintained in very poor conditions; specifically, there were holes in the wall and rodents have damaged some publications and collections. The collections are kept in bulk in the boxes and have never been individually inventoried. As a result, the inventory count could not be performed. Additionally, the museum staff and faculty raised concerns that some collections that are currently in the Ruthven building were not in proper climate conditions. As such, some of the collections had to be disposed of due to damage.
- The collections manager has the capability to delete records in the inventory management database and has physical access to collections, which creates an inappropriate concentration of duties.
- The Museum of Anthropological Archaeology has been using the Kelsey museum's valuation approach for the collections. Collection objects that have not been formally appraised are assigned a value of $200 each regardless of the true value that they may have. There has not been a formal review and approval of this approach.
- Each room in the Ruthven building that contains collections has a sign-in sheet on the door that students and faculty use when borrowing an object. Considering the easy access to collections and their closeness to the students' desks, which are in the storage rooms, an individual could take an object without the necessity of using the sign-in sheet or going through the collections manager.

Recommendation: The museum should reevaluate its entire inventory management process, consider the priorities, and redesign procedures to align with the museum's mission to "preserve the objects in their various collections to the best of their abilities, so that future generations can learn from them." The following steps should be considered by management:

a) Coordinate with LSA and identify the best approach to address the climate challenges in the department. Provide faculty and staff with training geared towards working as an effective team and respecting different personalities and job responsibilities. Perform continuous evaluation of the progress and address the results accordingly.
b) Start performing inventory reconciliations regularly.

1. Management of Collections	High

c) Educate faculty and staff on the importance of the inventory management process and the necessity to comply with the requirements.
d) Revise the off-boarding checklist and add the steps specific to museum operations, including external borrowing or lending of collections.
e) Assess the importance of collections that have not been inventoried, including collections at the North Campus location. Items should either be individually accessioned and stored in proper conditions or disposed of appropriately.
f) The museum should take advantage of the audit trail capabilities that will be available in the new inventory database system. Management should assign responsibility to review the transaction logs regularly to confirm that unauthorized deletion of records does not occur.
g) Review the current collection valuation methodology, benchmark against the industry standards, and formally conclude on an approach.
h) Create stringent controls over the internal borrowing process; specifically, limit access to the collections, assign lending responsibility to a particular staff member, and require regular follow-up on the borrowed objects.

Management Action Plan: We agree with the main thrust of this section. The collections of the Museum of Anthropological Archaeology have grown by accretion over the 80+ years of its existence, and the individual divisions of the museum have tended to operate with a great deal of autonomy. We believe the coming move to the Varsity Drive facility will provide the ideal opportunity to create the kinds of inventory control recommended by the report. The hiring of a new collection manager and full utilization of LSA funding to hire GSRAs affords us the opportunity to implement new positive changes. We will reevaluate the current policies and procedures related to inventory management.

a) We agree the climate between faculty and staff needs to be improved. We will consult with LSA and reach out to advisory organizations within the university to develop a plan to create a more engaging environment. We will assess the results and adjust the approach accordingly in collaboration with LSA.
b) Once the collections are fully inventoried, the museum will develop and document procedures requiring an annual reconciliation of collections. The museum will research the industry standards and determine the best sample size to use based on their operations and size of the collections.
c) The museum will review the current UMMAA (University of Michigan Museum of Anthropological Archaeology) policies and procedures to ensure processes related to museum inventory management and compliance with associated regulations are up-to-date. In addition, the director and collection manager will present this document annually (fall term) to the curators and graduate students. The director and collections manager will educate faculty on the importance of the inventory management process, the need to support staff members while performing their daily responsibilities, and U-M ownership of the collections.

1. Management of Collections	High

d) The museum will revise the current off-boarding checklist to ensure that museum-specific procedures are included. This would include the disposition of any artifacts they may have imported or have on loan, as well as require that they deposit with the museum any associated excavation permits and inventory of all artifacts and equipment.

e) A strategic plan will be developed to make the updating and completion of the collection inventory our top priority and assess which items may potentially be deaccessioned from the collection. Ideally, collection inventories will be prioritized based on the move schedule (Ruthven, Kipke, and then North Campus).

f) The museum is working with LSA to identify database software to manage the inventory of the collections, loans, and accession process. It is anticipated that the new software will track changes to records. The museum director or director's designee will annually audit the transaction logs. If we were to have two collection managers, they would share in this task.

g) The curator of each museum division, in consultation with the new collection manager, will assess their collections to identify objects that have commercial value, and will work with the Office of Risk Management to establish a realistic market value for those collections. The curators will also work with risk management to identify the best approach for the objects that do not have commercial value. Once the overall process is established, the curators will document the procedures, get them approved by the museum director, and apply the revised methodology to existing and new collections.

h) The museum will consult with LSA (e.g., cost, time commitment) and reevaluate the policies and procedure for stricter controls of internal loans. The management of the internal loans will be assigned to the collection manager. The procedures will be documented and included in the UMMAA policies and procedures manual.

The LSA dean's office expects that the museum will participate fully in assessment of Collections Management System (CMS) products during April and May, and that a decision on which product to adopt will be reached by the end of June. Following this, the LSA dean's office expects that the museum will move quickly to implement the selected database.

Action Plan Owners: Director and new collections manager

Expected Completion Date: Fall 2016

2. Collaborative Agreements	High

Issue: Researchers do not consult with any U-M central offices (e.g., the Office of Research and Sponsored Projects (ORSP), UMOR, the Office of the General Counsel (OGC)) when preparing to conduct research abroad, although some relationships with local governments or collaborative institutions may benefit from a contractual agreement. Faculty members at the museum have signed legal documentation on behalf of university without the appropriate signature authority.

2. Collaborative Agreements	High

Risk: The lack of proper written agreements may create unnecessary liability for the university and may potentially cause legal fines. U-M may enter into unauthorized contracts that could damage its reputation or put U-M at risk.

Support: When preparing to conduct research and excavations abroad, the museum researchers work with the local governments and/or collaborative institutions, who assist with obtaining proper authorization and documentation for excavation and who help organizing the research overall. As a general practice, there are no written agreements with the local governments or collaborative institutions specifying the details of the research fieldwork or any other contractual terms that may apply. Faculty indicated that they purposefully have avoided contacting U-M administration because they thought more formal agreements would delay the research planning process. In addition, one occasion was noted when an agreement with the collaborative institution was signed by a faculty member who did not have signature authority.

Recommendation: The museum should coordinate with university central offices (e.g., UMOR, OGC, ORSP) to establish criteria for when written agreements are needed and to define a review process when written agreements are necessary. Once a uniform process is established, management should start monitoring for compliance with the procedures. If circumstances of the relationship with a particular government agency or collaborative institution change, then it should be communicated accordingly. In addition, the museum should educate the faculty on the university policy and remind them that they are not authorized by the Regents to sign agreements that bind the university.

Management Action Plan: The director will work with university central offices and in coordination with them will develop and document procedures that will establish criteria for written contracts and define a review process for those. The director will monitor that the researchers consistently follow the process by incorporating a checkpoint into one of the fieldtrip approval processes (e.g., expense reimbursement, lump sum advance request). The director will educate faculty on U-M signing authority policies, distribute a copy of the policy requirements, and provide periodic reminders.

Action Plan Owner: Director

Expected Completion Date: September 2015

3. Permits	Medium

Issue: Permits are not translated to English. Permits for shipping soil and plants may not be issued under the appropriate university authority.

Risk: Lack of understanding of the permit terms and improper assignment of liability may lead to legal complications and reputational damage.

3. Permits	Medium

Support: Permits are required to perform research and excavation in foreign countries and are obtained by faculty prior to the start of fieldwork (on average, 4 to 6 permits are obtained each year by faculty and students). Currently, it is not a general practice at the museum to translate these permits to English. In addition, permits for shipping soil and plants are issued under the collection manager's name, which may not be appropriate. At the Kelsey museum, these types of permits are issued under the director's name. There is no clarity as to which approach is preferred and what the industry standards are.

Recommendation: The museum should require all permits to be translated to English to understand the terms of the permits. Similarly, translation to English should apply to any documentation that involves the museum and university. The requirement should be included in the museum policy manual. The faculty should provide the translated permits to the museum director prior to the start of research fieldwork. The museum should consult with OGC to determine the appropriate way to obtain shipping permits (i.e., whose name should appear on the permit) and to clarify whether or not this responsibility can be delegated. If necessary, solicit feedback from other LSA museums, or benchmark against industry standards.

Management Action Plan: The director will develop a policy to ensure that any proposed agreements or permits which commit University of Michigan resources or otherwise obligate the university, will be supplied in English for university review. With the recent departure of the collection manager, the USDA importation permits have been issued in the associate director's name. The museum will consult with other LSA museums and OGC to determine which position should be responsible for the permits.

Action Plan Owner: Director

Expected Completion Date: September 2015

4. OSEH Compliance Monitoring	Medium

Issue: Museum personnel did not dispose of hazardous waste in a manner consistent with the Department of Occupational Safety and Environmental Health (OSEH) guidelines.

Risk: Failure to dispose of hazardous waste in a timely manner could damage faculty and staff health and the environment.

Support: OSEH compliance responsibility for the museum's location in the Ruthven building was reassigned from the collections manager to a post-doctoral fellow two years ago, while the collections manager still manages this process for museum's location in CSSB. According to OSEH guidelines, the department is expected to contact Property Management no later than 60 days after the department started collecting waste, which gives Property Management 30 days to pick up waste and dispose of it. During the review of the lab in the Ruthven building, we noticed a box that had been collecting hazardous waste for 5 months, according to the date on the information

4. OSEH Compliance Monitoring	Medium

sticker. Contact with Property Management was initiated on the same day. The staff member admitted that it was prompted by the auditor's visit.

Recommendation: The museum should educate staff and faculty on OSEH guidelines and the importance of compliance, and establish a process to monitor timely removal of hazardous waste from the museum's premises. Given the temporary status of the post-doctoral fellow, the management should consider assigning this responsibility to someone with a permanent job status at the museum. This way, there will not be the need to retrain and will provide consistency in OSEH compliance monitoring.

Management Action Plan: We agree with this recommendation. There has been recent turnover in the collection manager and the post-doctoral fellow who were responsible for OSEH compliance monitoring and USDA importation permits. While the collection manager position is open, the associate director will manage the compliance monitoring for Ruthven and the assistant collection manager working at the Kipke location will manage the monitoring there. Once the vacant collection manager position is filled, OSEH compliance monitoring will be assigned to that person to monitor. The collection manager will be expected to train faculty and students on OSEH guidelines and document that the training has occurred.

Action Plan Owners: Director and new collection manager (when hired)

Expected Completion Date: September 2015

5. Travel Oversight	Medium

Issue: Faculty and students do not consistently register their university-related international travel with the university Travel Registry. Students do not consistently obtain the required health insurance.

Risk: Faculty and students may not be assisted in case of an international emergency. Students may not be protected if they get sick abroad.

Support: The museum's faculty and students travel abroad for research fieldwork several times a year. The travel is not tracked. The museum did not assign responsibility for monitoring faculty and student travel, including verification of registration with the Travel Registry and students' procurement of health insurance when traveling abroad. It is now managed by a GSRA/post-doctoral fellow for one of the nine curators. During the review of five faculty members and five students, we noted the following:

- 1 of 5 faculty members (20%) did not register their travel with the Travel Registry
- 1 of 5 students (20%) did not update the Travel Registry records when the trip was extended
- 1 of 5 students' health insurance (20%) did not cover the full length of the trip

5. Travel Oversight	Medium

In 2011, the LSA dean's office communicated a policy change around risk management for overseas study to all LSA units. The communication advised all LSA units that no study abroad program could take students abroad without proper risk management consultation with the Center for Global and Intercultural Study (CGIS). During the discussion with the LSA dean's office, we learned that the policy was intended to apply to any student travel abroad, including research; however, it was interpreted differently by the museum.

Recommendation: While LSA is working on clarifying the dean's office policy, the museum should start tracking the faculty and student travel consistently. Specifically, the museum should assign the responsibility to oversee faculty and student registration with the Travel Registry and students' procurement of health insurance to a staff member who could assist and monitor centrally for all curators.

Management Action Plan: We agree with this recommendation. The museum will work to develop a policy to ensure faculty and students (undergraduate and graduate) register their international travel and procure health insurance. This process will include assigning the oversight to a staff member. Recent changes to M-Compass (for both undergraduate and graduate student travel) will need to be incorporated into this plan. We would like to consult with LSA and other LSA units on the best practices to implement procedures for tracking international travel for faculty and students.

Action Plan Owner: Key administrator

Expected Completion Date: September 2015

6. Access Management	Medium

Issue: Access to secure museum collections is not restricted or monitored.

Risk: Valuable collection objects may be stolen or damaged.

Support: During the review of the museum's inventories in the Ruthven building and review of the process to grant and remove physical and electronic access to the museum's facilities, the following was noted:

- Some rooms in the Ruthven building that contain collections are not locked during the day.
- Although the museum attests it is the museum's general process to do an annual review of electronic access rights and remove access upon an employees' departure, the auditors found that access was not removed for two employees who had left the department.
- Although return of keys is an item on the LSA off-boarding checklists for both faculty and staff, the museum does not follow through on the process to ensure physical keys are returned when staff or faculty leave the museum. According to Key Request forms, it is the individual key holders' responsibility to return their keys to the Key Office upon separation from their unit. Considering the recent audit of the Key Office, it is our recommendation to wait for the DPSS University Security Services to conclude on the results of their task

6. Access Management	Medium

force initiative, which is expected to be completed by May 2015. The resulting best practices will provide an insight on the ownership of various processes related to management of access at the university.

- Student work desks are located in the same rooms where the museum collections are kept. The issue of unlocked storage rooms and presence of students' in the same space as collections should be resolved once the museum moves into the Varsity Drive building. The new building will have office space separate from the collection storage rooms. The rooms will only be accessible via electronic card reader.

Recommendation: Lock doors to rooms with collections when not in use. The museum should make every effort to collect physical keys from employees separating their service with the museum. In addition, the museum should update their off-boarding checklist to include a requirement to collect the keys and remove electronic access upon separation. The museum should also monitor that the process for annual access review is completed. Once the final decision about management of access is made more broadly for the university, the museum should align their procedures with the central policy.

Management Action Plan: We agree with this recommendation. Policies will be established to ensure rooms containing collections will be locked when they are not in use. On a set schedule (we recommend at the end of each term), we will be reviewing C-Cure access and key logs with the Key Office on campus to ensure that key inventories have been updated. The new employee and termination checklists will be revised to ensure key and building access responsibilities are included. We will follow up with these key holders before they leave to ensure the return of all keys. We will create a policy outlining this process. Once the decision about the management of access is made for the university, the museum will review its policy to ensure alignment with the central policy. The museum is currently in the planning phase to move. The access policy will be reviewed when the museum moves to ensure the policy is aligned with the central policy at that time.

Action Plan Owners: Director, key administrator, and senior administrative assistant

Expected Completion Date: September 2015

Follow–up Memos Issued

Closed

Life Sciences Institute 2012-201

Report issued September 2014 Follow-up report issued April 2015

University Audits completed an audit of the Life Sciences Institute in September 2014. A follow-up review was conducted and all corrective actions have been addressed as summarized below. **This audit is closed.**

Equipment Transfer: LSI did not always effectively monitor, track, or seek university authorization for equipment transfers. The LSI Director of Operations communicated the process requirements to the labs and assigned a staff member to work with Property Control to ensure equipment is properly tagged and asset information is updated in the campus asset management database. The majority of the departmental assets have now been tagged. LSI is following an escalation process with Property Control if assets are not tagged in a timely way. Any equipment transfers to other institutions will be appropriately authorized. **Closed.**

Risk Evaluation of Computers on Open Networks (RECON) and Security Plan: The audit found that LSI did not perform an IT risk assessment (RECON) in a timely manner, did not have an up-to-date security plan, and had not addressed some of the gaps identified in a previous security assessment. LSI has updated its security plan and completed a RECON. RECONs of all mission critical systems or systems containing sensitive data will be conducted at least every four years. The security plan will be reviewed and updated yearly and as RECONs are completed. The actions taken by LSI have adequately addressed the risks identified during the audit. **Closed.**

Internal and External Services: The audit found that LSI did not bill external customers within a reasonable time for services provided by the Center for the Chemical Genomics (CCG) and did not accurately price for services that included reagents. The LSI Finance team documented procedures for billing and invoicing for centers, requiring monthly billing for the provided services, and discussed the process changes with the CCG management. We confirmed that the billing is occurring monthly. Additionally, LSI met with the Office of Financial Analysis and agreed to continue to maintain standard material supply lists for each recharge rate. **Closed.**

Internal Controls Gap Analysis and Certification Process: During the audit, we learned that the LSI gap analysis process was not comprehensive, which resulted in inaccurate and incomplete department responses on the Annual Unit Certification of Financial Results and Internal Controls. LSI took steps to strengthen cash handling, expense reporting, and P-card review processes, specifically:

- LSI updated the written procedures for travel and expense reporting and for cash handling.

- Administrative staff were trained on the best practices for these processes.
- Two staff members are now responsible for cash deposits, so that receipt, deposit, and reconciliation duties are segregated.
- The department now uses a monthly cash log to document receipt of the deposits and the deposits are reconciled to a system report.
- Concur reports are reviewed quarterly and the appropriate staff are notified of errors.
- Expense report approval procedures were discussed with the relevant employee.
- Approver training was updated during the audit and will be reviewed annually during the internal control certification process.
- Check copies are no longer retained and cash deposits are locked in a secured cabinet if not deposited on the same day.
- System reports are used to review spending limits on an annual basis and adjust P-Card limits accordingly. **Closed.**

MHealthy 2012-201

Report issued December 2013 First follow-up report issued September 2014
Second follow-up report issued March 2015

University Audits issued a report for the audit of MHealthy in December 2013. After the first follow-up review in September 2014, MHealthy was still developing a process to ensure proper taxation of gift cards given to employees and documenting a memorandum of understanding for Project Healthy School. MHealthy has taken steps to address these remaining issues. **This audit is closed.**

Taxation of Gift Cards to Employees: To ensure compliance with IRS and university tax policies related to gift cards, MHealthy leadership consulted with Tax Compliance and Planning and will pay the taxes for all gift cards they distribute under $50. MHealthy will continue to work with Payroll to tax employees for individual gift cards given over $50. Since taxes will be paid up-front, this updated process eliminates the need for MHealthy to calculate the aggregate of gift cards they issue to an employee and eliminates the need to coordinate with the employee's administrative unit. MHealthy implemented this process beginning January 2015 and will process the taxes at the end of the year. **Closed.**

Project Healthy Schools: MHealthy and the Cardiovascular Center documented a memorandum of understanding to clarify roles and responsibilities for Project Healthy Schools including financial management and compliance with research regulations. The memorandum was finalized and signed in March 2015. **Closed.**

University Unions 2012-201

Report issued April 2013 First follow-up report issued June 2014
Second follow-up report issued March 2015

University Audits issued a report for the audit of Student Life University Unions (UU) in April 2013. After the first follow-up review, UU was still working to improve management of supplemental systems and credit card merchant processes. Student Life and UU are now making adequate improvements for both of these areas. Details are summarized below. **This audit is closed.**

Supplemental Systems*:* All three of the supplemental systems that were used for conference and event services billing are being replaced with one system, Kinetics (Kx). The vendor, Kinetics Software, will provide support and training for this system. The system has a financial package that will have a direct connection to M-Pathways so there will no longer be a need for dual entry.

Student Life continues to work with Financial Operations to expand UU's chartfield-based accounting structure to support multi-level reporting and analysis in M-Pathways. Since this requires significant chartfield changes, the updates will happen at fiscal year-end. A consultant has been hired to help facilitate this effort. In the interim, leadership agreed upon a standard report format for monitoring finances and has been using it since September 2014. Since the reports are manipulated in Excel to achieve the desired format, each one is reconciled to a report from M-Pathways to ensure accuracy.

While Student Life and UU are still working to fully automate their financial reporting, they have made significant progress, standardized and reduced supplemental systems, developed a thorough plan for implementation, and established adequate interim procedures for financial monitoring. **Closed**.

Credit Card Merchant Processes*:* Student Life developed a reporting and auditing process of credit card activity for UU units and is working to develop a policy so that all of Student Life is following the same procedures.

Each of UU's credit card terminals now has a distinct revenue purpose tied to it; co-mingling of the terminals has been eliminated. UU expects to eliminate four of their credit card terminals within the next six months by switching completely to an online system.

Student Life now has direct access to the merchant online system to monitor credit card activity, including refunds. They receive and review a daily transaction report from each unit using a credit card terminal. **Closed**.

Open

Bentley Historical Library 2014-201

Report issued June 2014 Follow-up report issued March 2015

University Audits issued the Bentley Historical Library audit report in July 2014. The audit noted several areas of improvement related to the control of the archive's operations. Subsequent to the audit, Bentley underwent several structural and personnel changes:

- Development of a shared services administrative and facilities management model between the Bentley Historical Library and Matthaei Botanical Gardens and Nichols Arboretum (MBGNA) as a result of the transfer of administrative support employees to the Shared Services Center.
- Appointment of a joint administrative director with shared responsibilities for Bentley and MBGNA.
- Reassignment of several management action plans to the joint administrative director due to the unexpected death of the division head of Bentley's Curation Services.
- Retirement of the head of the Michigan Historical Collections (MHC) division as part of the overall restructuring. There is no longer a separate division for the MHC.

The development of the shared services model between Bentley and MBGNA and the staff departures have caused many of the original action plans to be reassessed and prioritized to reflect current business needs and processes. To date, Bentley has fully addressed 4 of the 12 audit issues identified and the other 8 are in process. Management has provided revised action plans to address the remaining audit issues and has a re-energized focus to resolve these items.

Below is a summary of each audit observation and a description of the corrective actions taken by management. A second follow-up will be conducted during fall 2015. **This audit remains open**.

External Work Performed by Conservation Lab Staff: At the time of the audit, Bentley Conservation Lab employees were using Bentley facilities and resources to conduct after hours work for external clients. The client relationship was with the employee, not the Bentley, and the Bentley was reimbursed by the employee for the cost of supplies. All external work performed by the Conservation Lab has been terminated as of the beginning of fiscal year 2015. University Audits confirmed that no revenue is being generated from this activity. **Closed.**

Detroit Observatory: The historic Detroit Observatory does not meet current fire code requirements because fire alarms cannot be heard throughout the building. Bentley management is working with the Office of Risk Management and the fire marshal to remedy the situation. A project has been initiated with Plant Operations to upgrade smoke detection

alarms in order to comply with fire code requirements. In the interim, a trained docent will be stationed near the fire alarm panel when the building is in use to warn of any emergencies and relay evacuation procedures.

Due to limited funding for repairs and maintenance, the Detroit Observatory repairs in recent years have resulted in short-term fixes rather than long-term solutions. The MBGNA facilities management team is currently working with the program coordinator for the observatory to develop a long-term restoration and funding plan to rectify structural damage caused by age, weather, water seepage, and mold.

In 2008, risk management recommended purchasing insurance for the telescopes in addition to property insurance provided by the University. At the time of the audit, this coverage had not been obtained. The Bentley administrative director is working with risk management to determine appropriate insurance for the telescopes in the observatory. The target date for completion is July 2015. **Open.**

Security of Facilities: The Bentley did not consistently obtain positive verification that departing staff members had returned assigned building keys. As a short-term measure, entrance door PIN codes for all inactive/unauthorized employees have been terminated. A project to upgrade to card readers for external doors and stacks has been initiated. Until the card readers are installed, the human resources coordinator for Bentley and MBGNA will collect keys from departing employees. The target date for completion is October 2015. **Open.**

Contract Oversight: Management did not proactively verify that vendors processing archival materials carried appropriate, contractually mandated insurance coverage. Bentley management is working with procurement to determine if there are any existing multi-year agreements with insurance requirements for the vendor. If so, management plans to periodically verify coverage for the duration of the contract. For all future contracts, Bentley management will work with risk management and procurement to determine if the vendor needs to carry insurance as part of the terms and conditions. All future contracts will be for a one-year term; to renew contracts, the vendor will provide proof of insurance to the university. The target date for completion is July 2015. **Open.**

Disaster Recovery Plan: The disaster recovery plan is not complete and up-to-date, and it has not been tested. The Bentley associate director for academic programs and collections development is working with two archivists to establish a disaster recovery plan that will incorporate all Bentley operations including the observatory and off-site storage locations. Bentley will also conduct appropriate training, test the disaster recovery plan, and update the plan as required to reflect current business practices. The target date for completion is July 2015. **Open.**

Environmental Controls in Archives: At the time of the audit, management did not monitor environmental conditions in all parts of the collection and had not remedied significant environmental problems related to temperature and humidity. Bentley management is working with the university administration to procure archival storage in climate-controlled collections space that will also provide the archive with space for growth in the foreseeable future.

Currently, the day-to-day responsibility for maintaining Bentley's facilities has shifted to the MBGNA Facilities Department as part of the shared services transition. None of the four humidifiers in Bentley's main building are presently operational. A work request form has been initiated to repair the four non-working humidifiers, which should bring the humidity and temperature within acceptable ranges. The target date for completion is July 2015. **Open.**

Insurance for Fine Art: Insurance needs for fine art in the Bentley's collections have not been evaluated. The Bentley administrative director is working with risk management to assess the collections and purchase additional insurance if necessary. The target date for completion is July 2015. **Open.**

Security of Donor Information: Private personal information (PPI) of donors was not safeguarded adequately. All donor information has been moved to a secure server. All filemaker databases including BEAL (Bentley Electronic Accession Locator) have been migrated to the ITS provided MiServer. University Audits verified that the BEAL filemaker database that contained personal donor information now exists on MiServer. Bentley ultimately plans to transfer all donor information maintained in BEAL to the Development Office's DART system. **Closed.**

Collections Backlog Management: The Bentley did not regularly monitor the processing of new items for inclusion in the collection. Bentley has implemented a plan to manage and monitor the accession process. A new manual for students and professional staff that emphasizes a "More Product, Less Process" approach has been developed to increase the efficiency and effectiveness of the archival process.

Archivists are in the process of improving recordkeeping in the library's BEAL filemaker database by reviewing/verifying backlog records and implementing workflows to ensure all completed projects are removed from the backlog. The target date for completion is August 2015. **Open**.

Time Reports and Travel Expenses: At the time of the audit, time reports and travel expenses were not reviewed and approved by a higher administrative authority as required by university policies. University Audits verified that supervisors knowledgeable of the work performed are now approving time for their direct reports. We also verified that supervisors are included in the approval workflow and have approved travel expenses for their direct reports. However, Bentley expense approvers and reviewers need to complete the required approver course. The target date for completion is July 2015. **Open.**

Conflict of Interest and Conflict of Commitment (COI/COC): At the time of the audit, management did not have an effective process to identify and manage conflicts of interest (COI) and conflicts of commitment (COC). University Audits verified that all Bentley staff members have completed the online COI/COC tutorial. Beginning in fiscal year 2016, Bentley will follow the provost's office COI/COC policy.

The MBGNA human resources coordinator assumed the role of the COI/COC representative. An annual email reminder will be sent to all Bentley staff reminding them to complete the COI/COC tutorial on the provost's office website and submit a signed certificate of completion for their human resources file. This email will also include the "Procedures for COI/COC" attachment, which will specify that staff members must promptly disclose conflicts as they arise or are identified. **Closed.**

Cash Handling: Cash handling duties were not segregated appropriately. Bentley staff and management had not completed appropriate training related to cash handling and credit card processing. Management has segregated cash receiving, recording, and reconciling duties. University Audits verified that all individuals who handle cash and credit card transactions are current on their training. **Closed.**

General Laboratory Safety 2014-401

Report issued July 2014 Follow-up report issued March 2015

University Audits completed an audit of general laboratory safety in July 2014. The focus of the audit was a review of overall general safety, accountability, and governance structure. This was a broad based audit, which included recommendations that can be implemented in the short-term, and others, such as establishing a university-wide culture of safety, which will require a longer time frame to effectively address. This is the first in a series of updates. University Audits will follow up in September 2015 to assess continued progress toward strengthening the general laboratory safety culture at the University of Michigan.

Information regarding implementation of management’s action plans is below.

1. Safety Culture

Audit Issue: U-M lacks a robust integrated process to foster a safety conscious laboratory work environment.

Management Action Plan	February 2015 Status	Actions to be Taken	Individuals Responsible
Senior leaders recognize the importance and obligation of the university to provide and promote a safe and healthy work and learning environment, as well as to promote a comprehensive research safety program. A statement to that effect will be written by the three executive vice presidents and the vice president for research and it will be communicated annually to every school and college.	A campus-wide statement has been drafted and approved by the provost and executive vice presidents. **This remains open until the statement has been issued.**	The original expected completion date for the first annual statement was December 2014. The revised completion date is March 2015 to coincide with the launch of a campus-wide safety campaign.	Vice president for research
The Architecture, Engineering, and Construction (AEC) team has already shifted design for the new Biological Science Building to the updated standard to include separation of work activities in the lab isolated by glass partitions. AEC's design guidelines for new labs and major renovations will be updated to reflect the evolving state-of-the-art infrastructure requirements.	The laboratory design standards have been updated.	**This item is complete.**	Associate vice president for facilities and operations
A provisional draft of Standard Practice Guide (SPG) Sections 605.01 and 605.02 will be available by December 31, 2014.	Provisional draft for the revised SPG Section 605.01 has been prepared and is being circulated with leadership. This SPG will be the umbrella policy statement for campus. A structure of more specific policies will build off this umbrella policy. A SPG specific to Research Safety is being drafted by the UMOR policy committee. **This issue remains open.**	Draft SPGs are with leadership for review and approval.	Owner of umbrella SPG is the executive vice president and chief financial officer Owner of research safety SPG is interim vice president for research

1. Safety Culture

Audit Issue: U-M lacks a robust integrated process to foster a safety conscious laboratory work environment.

Management Action Plan	February 2015 Status	Actions to be Taken	Individuals Responsible
A group will be established to review and make recommendations for addressing the issues of administration, faculty, and lab manager responsibilities for safety. The group will solicit feedback and guidance from the deans on a variety of issues.	A faculty member has been appointed to lead the Lab Safety Policy Committee, which has been meeting since December. **This issue remains open.**	The group has met twice and the work is on going. Expected completion date for preliminary plan by June 2015	Executive vice presidents for academic affairs, Business and Finance, medical affairs, and the vice president for research

2. Oversight and Monitoring:

Audit Issue: U-M does not have a university-wide oversight body and escalation process to promote lab safety and accountability. Additionally, lab managers and principal investigators lack consistent department-level structure to promote safety, communicate new initiatives and regulations, and proactively address risks.

Management Action Plan	February 2015 Status	Actions to be taken	Individuals Responsible
A Laboratory Safety Committee (LSC) will be established jointly by OSEH and UMOR to address safety issues. The committee will report to the university Research Compliance Advisory Committee (RCAC) and provide regular reports on the progress made in improving the campus safety culture and on issues of concern.	UMOR and OSEH have collaborated to establish a standing university-wide Laboratory and Research Safety Committee (LRSC), patterned after the Radiation Policy Committee. **This issue remains open.**	*The committee has been charged and appointed, and the first meeting is scheduled for March 2015*	*Executive director of OSEH and assistant vice president for research policy and compliance*
Each college, school, and all major research units with laboratories will establish a unit-level laboratory safety committee. Small research units or departments may collaborate to establish shared, unit-level laboratory safety committees.	A faculty member has been selected to chair the Lab Safety Policy Committee. With the assistance from LRSC, they will help define roles and responsibilities at all levels, including the unit-level safety committees and the safety coordinator role**. This issue remains open.**	*The Lab Safety Policy Committee has been meeting since December 2014 and is working on the roles and responsibilities for implementation of unit-level safety committees and formalized job descriptions, standard operating*	
The LSC will develop the charge for the unit-level safety committees and create position descriptions, standard operating procedures, and performance evaluations for the safety coordinator positions.			

2. Oversight and Monitoring:
Audit Issue: U-M does not have a university-wide oversight body and escalation process to promote lab safety and accountability. Additionally, lab managers and principal investigators lack consistent department-level structure to promote safety, communicate new initiatives and regulations, and proactively address risks.

Management Action Plan	February 2015 Status	Actions to be taken	Individuals Responsible
Units will be required to provide information about reporting lines and local oversight authority for the safety coordinators.		*procedures, and reporting lines for the safety coordinators with an expected completion date of June 2015.*	

3. Defining the Lab Population and Identifying Hazards
Audit Issue: The University does not maintain an accurate centralized inventory record of laboratory locations, potential hazards, required safety equipment, and required safety training for personnel.

Management Action Plan	February 2015 Status	Actions to be taken	Individuals Responsible
OSEH has initiated a process to categorize laboratories based on risk. By March 2015, OSEH will visit all labs and rank risks to the appropriate LHR (lab hazard rankings) categories. OSEH will assess staffing levels in the laboratory safety program, based on the LHR process, to meet the established inspection schedule.	OSEH is completing the categorizing of laboratories based on risk and assessing their staffing levels to meet their inspection schedule. **This issue remains open.**	The assessment will be completed by June 2015 to insert budget initiatives into the fiscal year 2017 budget cycle.	Executive director of OSEH and assistant vice president for research-regulatory and compliance oversight
As part of the IT governance process, a proposal was submitted to the Administrative Domain Advisory Committee on May 20, 2014, for IT support to assess the feasibility of creating a comprehensive management information system to collect and manage laboratory information across campus.	UMOR has submitted a proposal to IT governance. **This issue remains open.**	Work in progress.	
OSEH will work with UMOR and the provost's office to establish a consistent, university-wide process of notifying OSEH whenever a new lab is brought on line or an existing lab undergoes major renovations in order to perform a	Work in progress. **This issue remains open.**	A process for alerting OSEH about new labs is to be established by March 2015.	

commissioning of the operations. This process will be established by March 2015.			
Laboratories have been required to maintain chemical inventories as part of their Chemical Hygiene Plan. The inventories have been available for use by staff in the labs, but were not centralized or in a consistent format for use by OSEH. In 2009, OSEH implemented use of the web-based Environmental Health and Safety Assistant (EHSA), but there is no mandate that everyone must use EHSA. OSEH will review the use of the Chemistry system and the EHSA system for managing chemical inventories across campus and will work with UMOR and the provost's office on the best method to require laboratories to use and maintain their inventories in either of the two systems by December 2014.	OSEH has revised the Chemical Hygiene Plan to require labs to transition to the Environmental Health and Safety Assistant (EHSA) starting in 2015.	**This item is complete.**	

Training and Education

4. **Audit Issue:** OSEH provides effective training programs based on the type of lab environment, but the university does not have an effective way to monitor that all lab personnel, visiting scholars, guests, or other personnel have taken required training.

Management Action Plan	February 2015 Status	Actions to be taken	Individuals Responsible
OSEH will work with ITS so annual reminders will be sent to lab staff for required classes in MyLinc. OSEH will also document all training in the MyLinc system regardless of where the training was received so there is one source for training records.	OSEH has worked with ITS to reset parameters and provide annual reminders about training. OSEH enters all training in the MyLinc system.	**This item is complete.**	Executive director of OSEH and assistant vice president for research-regulatory and compliance oversight
The OSEH, UMOR, ULAM, and hospital training is managed using two primary systems – MyLinc and MLearning. Discussions regarding upgrading the training management system for employees have been underway for several years between University Human Resources (UHR) and ITS. Business and	OSEH has begun a discussion of the training system with Human Resources. **This issue remains open.**	Ongoing dialog with HR and OSEH will optimize current system to meet their training needs.	

Training and Education

4. **Audit Issue:** OSEH provides effective training programs based on the type of lab environment, but the university does not have an effective way to monitor that all lab personnel, visiting scholars, guests, or other personnel have taken required training.

Management Action Plan	February 2015 Status	Actions to be taken	Individuals Responsible
Finance agrees with the goal of creating one system used by everyone at the University, and will work through ITS and UHR as the business owner for employee training management to support it becoming a U-M priority in the IT governance process. Facilities and Operations will resubmit the project to ITS for reprioritization by December 2014.			
OSEH will work with provost's office and UMOR to develop and implement an orientation program that can be used by principal investigators or lab managers to inform both workers and visitors in the lab of the risks and requirements.	Work in progress. **This issue remains open.**	The orientation process is scheduled for implementation in June 2015.	

5. Monitoring Reports and Trend Analysis
Audit Issue: OSEH is not communicating full inspection results to school or unit leadership. Further, OSEH does not provide an analysis of safety trends to the wider university community.

Management Action Plan	February 2015 Status	Actions to be taken	Individuals Responsible
OSEH will investigate the types of trend analysis that can be performed from the data available, and will prepare a draft report template to share with constituents as a model of the type of information that can be reported on an annual basis. Information gathering will be complete by March 2015 in order to begin providing the reports to constituents by June 2015.	OSEH management is having discussions with unit leadership to determine what information is most relevant and desired. **This issue remains open.**	OSEH is on schedule to complete the assessment by June 2015.	Executive director of OSEH
OSEH will investigate the types of trend analysis that can be performed from the data available. Root cause analyses are already performed on major lab safety incidents. OSEH will work with appropriate offices to determine venues and types of information that can be broadly shared. The trend data sharing will be in place by June 2015.			

6. Safety Role Definitions

Audit Issue: Roles are not defined for the groups and individuals responsible for lab safety at the university.

Management Action Plan	February 2015 Status	Actions to be taken	Individuals Responsible
OSEH and UMOR will establish a document that defines the roles of each stakeholder in the campus safety environment related to laboratory safety. This document will be vetted with executive officers for formal adoption, and will be used as the basis for reviewing and updating various safety and health policies and guidelines. The assessment will be completed and the document will be drafted by October 2014 and be ready for formal adoption by December 2014.	Coordination of this process has been delegated to the person who will also coordinate the unit level safety committee. **This issue remains open.**	OSEH will evaluate and update their guidelines and policies. Expected completion date is June 2015.	Executive director of OSEH, and assistant vice president for research-regulatory compliance and oversight
OSEH will begin the process of evaluating and updating OSEH guidelines and policies once the formal adoption of the safety roles has been completed and will have all OSEH guidelines updated within six months of beginning the process. Tentatively, based on the timeline in the first recommendation above, this effort will be completed by June 2015.			
An effort is underway to revise contract language for agreements governing how we use laboratories in relation to outside entities. This effort will require engagement of the Office of General Counsel in developing standard contract language including compliance oversight as a first step. The second step will require a leadership-driven process to make the use of the language mandatory among all university entities entering into such agreements.	OSEH committed to working with OGC to develop standard contract language for lab use with outside entities. **This issue remains open.**	OSEH met with OGC in late February. OSEH will provide standard language to insert in contracts that OGC will develop. Expected completion date is July 2015.	

7. Communication and Awareness

Audit Issue: Although OSEH provides robust safety training and guidance, the methods of communicating requirements for lab safety are not always effective.

Management Action Plan	February 2015 Status	Actions to be taken	Individuals Responsible
UMOR will join with OSEH and key campus communicators to devise and implement a comprehensive communications plan aimed at strengthening and maintaining the culture of laboratory safety.	To improve the methods of communicating safety awareness, OSEH put a link to the University Compliance Hotline on their website. Compliance Hotline posters were also made available to units. OSEH held their first annual campus-wide Safety Fair in October 2104 and is working with Michigan Marketing and Design to redesign their website. OSEH and UMOR's communication teams are working to develop a year-long schedule of activities and events to build and sustain awareness among students and faculty, including a survey to assess safety awareness and a poster to be placed on websites and in labs. **This issue remains open.**	Work in progress. Key elements of the plan under development with a launch of the campaign in expected spring 2015.	Executive director strategic communications, UMOR

School of Dentistry 2014-215

Report issued May 2014 Follow-up report issued March 2015

University Audits issued a report for the audit of the School of Dentistry in May 2014. We recently conducted a follow-up review to assess progress toward addressing the audit recommendations, including the salary and incentive model, patient payment plans, and

controlled substances procurement and inventory. Many of the management action plans have been completed and significant progress has been made in implementing the remaining management action plans. University Audits will conduct a second follow-up review during the second quarter of fiscal year 2016. **This audit remains open**.

Salary and Incentive Model: Salary and incentive models of other units on campus and at peer institutions were reviewed. A new model was developed and implemented taking into account these reviews, the mission of the School of Dentistry, and the goal to provide competitive compensation. Every new faculty offer letter is reviewed by the associate dean for faculty affairs and institutional effectiveness before it is sent and includes an explanation of the model. As part of the review, the associate dean verifies that the offer letter includes teaching requirements. All current faculty contracts and offer documentation have been reviewed. A spreadsheet was created to identify documents that could not be located. Documentation of faculty hiring and compensation documents are being updated on an individual basis and discussions include the Office of General Counsel (OGC) when necessary.

A faculty staffing model was developed and is continually updated and referred to prior to the hire of any new faculty to verify there is a teaching need. The model is driven by the curriculum of the School of Dentistry. All components of the management action plan have been implemented. **Closed.**

Patient Payment Plans: The school worked with the OGC to prepare a payment plan information sheet outlining the steps in the credit check with links to the applicable regulations. Additionally, the payment plan contract and Clinic Billing Office procedures were updated, reviewed, and approved by OGC. **Closed**.

Controlled Substances Procurement and Inventory: The Drug Enforcement Agency (DEA) licenses for anyone ordering controlled substances have been provided to the University of Michigan Health System (UMHS) Pharmacy. The pharmacy has agreed not to fill the orders unless there is a valid DEA license on file. Additionally, all clinic orders for controlled substances are made via the pharmacy's online ordering system.

All clinics with controlled substances have been informed that inventory and wasting must be conducted, witnessed, and documented by two individuals. An infection control analyst has been assigned to periodically monitor controlled substances practices to verify compliance. The infection control analyst is developing documentation outlining desired practices and standards that will be used during his monitoring activities.

As part of the effort to maintain appropriate practices around procurement, storage, and disposal of controlled substances, the school arranged for the health system's DEA consultant to visit the school's three clinical locations. The school has addressed his initial concerns.

Appropriate segregation of duties for the controlled substance procurement process has been established. **Closed**.

Business Associate Agreement: Dentistry has entered into an agreement with a third-party vendor to send and receive patient personal health information via email. The third-party vendor has signed a Business Associate Agreement. **Closed.**

Credentialing: Each month, patient services generates a list of faculty for whom either their Basic Life Saving certification has expired or Dentistry does not have a copy of their current certification card. A letter is generated using a mail merge document for the associate dean's signature, notifying the faculty member that their privileges will be suspended if the school does not receive documentation of current certification by a specified date. A copy of the letter is also sent to the applicable department chair and department administrator. If the requested information is not received by the deadline, the faculty member's access to the patient information system (MiDent) is removed by the clinic manager, which stops the faculty member from being able to practice in the clinic.

Full-time faculty are in compliance with tuberculosis testing. Dentistry has seen a marked increase in adjunct faculty being tested for tuberculosis and continues to encourage adjunct faculty to be tested. Compliance of adjunct faculty with testing requests will be reviewed as part of the second follow-up. **Open.**

Adjunct Onboarding and Oversight: A committee was assembled with a charge to address adjunct faculty onboarding and oversight. The scope expanded beyond the original management response (e.g., building a website). The committee developed a draft of a single workflow for onboarding that includes MiDent training; the workflow is to be reviewed and approved by department administrators prior to implementation. The committee determined that the official contact method for communicating with adjuncts will be U-M email. While redirection to other emails is allowed, it is expected that adjuncts or their appointee will check the email weekly. An adjunct faculty distribution list was developed to streamline communications.

Due to the expanded scope, not all components of the management action plan are complete. Completion of the following components will be reviewed as part of the second follow-up: development of a plan for ongoing MiDent training, institution of a regular process or system to initiate review of offer letters and contracts of adjuncts, selection or creation of a system to verify contract requirements (e.g., safety and health compliance) are met, and development of a comprehensive annual process for adjunct renewal that is not limited to processing of administrative tasks. **Open.**

Additional Compensation Payments: Policies related to additional compensation have been drafted and the dean is reviewing them. Incentive payments and administrative differentials continue to be approved by the dean and her approval for the current fiscal year is now

evidenced through her signature on spreadsheet printouts and emails. These payments are entered directly by the Human Resources Shared Services staff at the School of Dentistry and are no longer initiated by department staff.

All additional compensation earn codes reviewed during the initial audit, were again reviewed as part of follow-up from July 2014 through December 2014. A sample of 10 additional compensation payments was selected for testing and four exceptions were noted. Of these, three were remediated and the human resources director continues to work through one exception relating to support for an administrative differential. This documentation will be reviewed and an additional sample will be tested as part of the second follow-up. **Open.**

Clinic Medicaid Procedures: The Comprehensive Care Clinics (pre-doctoral dental and hygiene students) and all other Graduate Clinics accept all Medicaid patients with no scheduling restrictions. Acceptance of Medicaid is included in the patient information page of the school's website. The Department of Patient Services has prepared procedural process documents and made them available for all staff, students, and faculty in all clinics via a shared drive. Reviews and reminders of these policies and procedures are conducted periodically at dentistry faculty and staff meetings. The manager of the Clinic Billing Office reviews claims prior to submission so that procedures that are not considered a covered benefit by Medicaid are not submitted to insurance. Benefit coverage templates were reviewed and updated when necessary. **Closed**.

Job Responsibilities and Performance Evaluations: In April 2014, the dean outlined the performance review and compliance requirements in a memo to department chairs, deans, directors, and unit managers. A policy and instructions, including escalation procedures was drafted by Human Resources and is under review by the dean.

As part of annual evaluations, job responsibilities for all positions are reviewed for accuracy and updated if necessary. Annual performance evaluations are a school requirement and must be documented and signed by the reviewer and the employee. Copies of the Annual Performance Summary are sent to Human Resources to verify evaluations were completed. The Human Resources Service Center in the School of Dentistry tracks the annual completion of these evaluations and follows up on all that are outstanding. A random sample of employee evaluations was selected, all were complete and signed by the employee and their supervisor. **Closed.**

Compliance Roles and Responsibilities: The school has documented the areas of compliance within the school and populated a compliance matrix outlining responsibilities for each compliance area. A compliance workgroup has been established and is comprised of faculty and staff from research, patient services, and compliance. The workgroup meets at least monthly. The compliance officer has a dual reporting relationship with the dean and senior associate dean. Senior leaders in the school are made aware of pressing compliance issues in real time, and status or update reports are provided during scheduled meetings. **Closed.**

Disposal of Controlled Substances: School of Dentistry worked with the U-M Health Systems Legal Office to determine how to best dispose of unused controlled substances. Currently, clinical areas in the school are using buckets containing kitty litter to dispose of their controlled substances. In September 2014, the DEA published a final rule regarding the disposal of pharmaceutical controlled substances. This ruling may impact current disposal practices. The school has committed to continue to collaborate with the UMHS Legal Office to stay aware of best practices. **Closed**.

Human Subject Incentive Payment (HSIP): The oral surgery study that was noncompliant with university HSIP requirements is no longer recruiting patients. The principal investigator sent a message to all department faculty and to the department study coordinator reminding them of university HSIP requirements. The Office of Research and Training reviewed HSIP requirements and procedures at a department administrators meeting on June 17, 2014. **Closed.**

Conflict of Interest and Conflict of Commitment: The faculty conflict of interest (COI) and conflict of commitment (COC) policy has been revised. The draft will be reviewed and approved by the Executive Committee before it is sent to the provost for approval. Final approval by the provost and verification of the inclusion of the annual COI/COC disclosure as part of the annual performance evaluations will be reviewed as part of the second follow-up. **Open**.

Nepotism: Policies related to nepotism have been drafted and the dean is reviewing them. During follow-up, the human resources director reviewed all instances of potential nepotism reported to her by University Audits during the original audit. The director continues to work through developing or updating management action plans for identified employees. The policy and resulting action plans will be reviewed as part of the second follow-up. **Open.**

Procurement Expenses: University Audits reviewed a sample of 20 travel and expense transactions processed from July 2014 through September 2014. Four exceptions were identified, including:

- An expense submitted outside of the 45-day requirement without explanation
- Sales tax paid unnecessarily, but identified by the reviewer and noted in the comment section of the report
- Exceeding limits stated in university policy for hosting meals, but was reviewed and approved by the director of finance

The finance manager has committed to continue having accounting and procurement staff communicate best practices to school faculty and staff.

An updated best practices document was distributed to all department administrators, department chairs, and directors. The document is also available as a link on the school's accounting and procurement web page and is in a folder in a shared directory. A brown bag session was held in August 2014. The director of finance is designated as the higher-level administrative authority to pre-approve business class travel. School policy is to follow University of Michigan Standard Practice Guide, Section 501.12 regarding student gifts. **Closed.**

Segregation of Duties: Adequate segregation of duties related to the acceptance of cash on the day of a Continuing Dental Education event has been implemented. **Closed.**

Leased Space Agreements: The missing lease agreement was obtained. A schedule is currently in place that includes lease start and end dates. Review of the current lease schedule showed there is evidence of timely review and follow-up on leases nearing their expiration date. **Closed.**

Service Agreements: The Community Based Dental Education (CBDE) office maintains a spreadsheet of all current service agreements listing the facility, city, and expiration date. The service agreements' spreadsheet is owned and updated by the CBDE administrative specialist and is shared with the assistant dean for CBDE and the administrative assistant. Testing showed all agreements are current. **Closed**.

Internal Control Gap Analysis: School of Dentistry Finance predetermined which departments did not have to complete sections of the Gap Analysis and labeled them as "not applicable" prior to each departments' initiation of their work. Each department completed all of their assigned analyses. The director of finance reviewed all responses and conducted follow-up with the departments to address any gaps identified. Results were reviewed at a September 2014 administrator meeting. The director of finance reviewed the results with the dean including summary reports, summaries of detailed work performed, and specific follow-up work being completed by departments. The dean certified the responses. As a pilot, one department has been selected to be the first area to sub-certify for fiscal year 2015. **Closed**.

Travel Registry and Policy: The school has increased compliance with the travel registry policy. An annual reminder to use the U-M Travel Registry for all international travel is sent to all staff and faculty and the school's electronic Time Away form now includes a link to the travel registry and a reminder that all international travel must be registered.

While the university is in the process of developing reports to monitor travel for compliance with the university's Standard Practice Guide, staff with oversight responsibilities in the school are encouraged to request the "view only" access role available through the travel registry web page to better monitor travel activity. **Closed**.

Cash Handling and Depository Training: All cash handlers reviewed during follow-up testing were current with university cash handling training requirements. Access to the MiDent system will be automatically suspended if cash handlers do not renew their cash handling certifications before they expire. **Closed**.

Student Discount Eligibility Verification: The School of Dentistry conducted a review and update of the student and family discount plan in February 2014. Procedures for staff who verify student status are outlined in detail and accessible through a school-wide shared drive.

Beginning with fall 2014 semester, the patient services administrative specialist will run a report at the end of each semester to verify that scanned IDs match the code in the records. Beginning with the class graduating in winter 2015, exit interview checklists will be updated to include a step to remove student and family codes from the MiDent system upon graduation. Testing of code removal will be conducted as part of the second follow-up. **Open.**

Graduate Program Admissions: Graduate program directors have provided the associate dean for academic affairs with graduate program admissions processes and selection criteria for all active graduate programs, which are now stored electronically in a password protected folder. These processes were reviewed by the Graduate Program Directors Committee and it was determined that the processes are similar for all programs, with some exceptions related to using the MATCH service for the Orthodontics program. The Graduate Program Directors Committee and the associate dean for academic affairs agreed that the individual difference between admissions criteria to the various programs was appropriate given the unique nature of each program's pool of applicants and program requirements.

Beginning May, 1, 2015, all graduate programs will store spreadsheets used in the admissions process in a password protected M+Box folder for their program and will limit access to the spreadsheet to only the program director and one administrative staff person. Cells will be locked to protect the integrity of the data. Because verification of the updates and changes of these documents cannot be reviewed until the beginning of the next academic year, they will be reviewed as part of the second follow-up. **Open**.

Sponsored Programs Office of Contract Administration 2014-502

Report issued September 2014 Follow-up report issued April 2015

University Audits issued a report for the Office of Contract Administration (OCA) audit in September 2014. In December 2014, the U.S. Government implemented federal award guidance, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards,* which adds additional administrative requirements on subrecipient monitoring and eligibility for any new awards after December 26, 2014. A follow-up review was recently conducted to assess progress towards completion of management action plans. Substantial progress has been made in addressing the audit issues and implementing the new federal requirements. Two issues remain open. A second follow-up will take place in November 2015. **This audit remains open.**

Subrecipient Monitoring Roles and Responsibilities: At the time of the audit, the federal expectations for monitoring recipients of federally sponsored subcontracts had not been clearly defined, communicated, and documented. There was also a lack of university guidance for subrecipient monitoring.

Since the audit, a Federal Subrecipient Monitoring Guide has been created by OCA that provides guidance to all individuals involved in monitoring and management of subrecipients, including principal investigators and department administrators. The document clearly indicates the responsibilities of each party for the administrative and programmatic aspects of a project. As part of the Uniform Guidance transition plan, the OCA website will be updated to provide more guidance and clarity around subrecipient monitoring roles and responsibilities. As procedures for subrecipient monitoring and eligibility are updated and improved, policy and procedures will continue to be developed. **Open**

Subrecipient Eligibility Requirements: At the time of the audit, the university did not always assess subrecipient eligibility and financial viability prior to awarding subcontracts. A process has been developed to review the eligibility of potential subrecipients prior to approval of a subcontract and the process is currently being piloted on new federal awards. Management plans to fully implement this process by July 2015, pending approval by senior management for the hire of two new full-time employees.

The proposed accounting positions will be responsible for managing the pre-award risk assessment and the review of invoices for compliance with federal requirements prior to payment. Standard operating procedures have been developed as well as job descriptions and decision tree templates for determining eligibility. **Open**

Pre-award Compliance Requirements: The grants and contracts associate director is now verifying that DUNS (Data Universal Numbering System) and CFDA (Catalog of Federal Domestic Assistance) numbers are present in all federal subawards prior to signing and executing the subaward. **Closed**

Nonfederal Subcontract Templates: The Office of General Counsel (OGC) has reviewed and approved current subaward templates as of January 2015. Templates will be reviewed by OGC on an annual basis. The approval date is tracked on the template. **Closed**

Invoice Numbering System: During the audit, it was identified that invoice numbers assigned to subcontract invoices were creating unnecessary rework for OCA staff including incorrect identification of invoices that appear to be duplicate, but actually are valid individual invoices. Accounts Payable now investigates these invoices prior to routing them to OCA to check for potential duplicate invoices. If an invoice is found not to be a duplicate, then it is given a unique invoice number by Accounts Payable prior to routing it to OCA. **Closed**

Student Domestic Travel – Sponsored Teams and Groups 2013-110

Report issued July 2014 Follow-up report issued March 2015

University Audits issued a report for the Student Domestic Travel – Sponsored Teams and Groups audit in July 2014. A follow-up review was recently conducted to assess progress toward addressing the audit recommendations. While the issues remain open, progress has

been made towards remediation. A second follow-up will take place in October 2015. **This audit remains open.**

Process Owner/Policy and Guidance: Stakeholders in Academic Affairs and Student Life across all three university campuses have been identified for the creation of a workgroup focused on practices for university-sponsored student domestic travel. The group will be tasked with recommending principles to consider in developing resources for travelers, defining a set of practices around domestic travel, and identifying areas where formal policy may be needed.

Additionally, the U-M Travel Registry is in the process of being reviewed and potentially redesigned to better accommodate domestic travel. There are considerations for new software and additional functionality in the U-M Travel Registry to connect safety plans based on the location an individual is visiting, as well as the ability to push notifications and forms to users. **Open.**

UM Dearborn College of Arts, Sciences, and Letters 2013-401

Report issued September 2013 First follow-up report issued June 2014
Second follow-up report issued March 2015

University Audits issued a report for the audit of the UM-Dearborn College of Arts, Sciences, and Letters (CASL) in September 2013 and a follow-up report in June 2014. We recently conducted the second follow-up review to assess progress toward addressing audit recommendations in several areas including financial oversight, conflict of interest and commitment, safety of minors at CASL, agreements with third-parties, faculty course releases and stipends, records and advising, and roles and responsibilities. While some progress has been made, several initial expected completion dates were not met and additional time to complete the management action plans is necessary. University Audits will conduct a third follow-up during the second quarter of fiscal year 2016. **This audit remains open.**

Financial Oversight: Financial oversight in CASL is decentralized resulting in varied departmental internal controls. CASL has committed to centralizing key financial tasks to improve efficiency. Implementation is expected by the fourth quarter of fiscal year 2016. In the interim, the following issues are being addressed:

- *Procurement:* Department chairs were reminded of Concur expense report approval requirements and P-Card application routing requirements. The financial manager is periodically reviewing Concur reports to verify compliance with expense report approval requirements. **Closed**.
- *Cash Handling:* Department chairs will be reminded of cash handling requirements by March 2015. **Open.**
- *Reconciliations:* Procedures are being prepared to address the reallocation of responsibilities for reconciliations for staff on leaves of absence or when a position is vacant. Procedures for Gross Pay Register Reconciliation and time approval for the six academic departments have been prepared and will be implemented by April 2015. **Open.**

- *Shadow Systems:* Departments have stopped using shadow systems and training sessions in eReconciliation, M-Reports, and Unit Defined Commitments will be conducted for all department administrators by April 2015. **Open.**
- *Documented Procedures:* Procurement procedures have been documented and disseminated to CASL administration and department staff. Gross Pay Register and Statement of Activity reconciliation procedures will be documented and implemented by April 2015. Cash handling procedures will be documented after key financial functions are centralized in the dean's office in the fourth quarter of fiscal year 2016. **This issue remains open.**
- *Internal Controls Certification and Gap Analyses:* A gap analysis was not completed for fiscal year 2014. CASL continues to work toward a new process for sub-certification. **Open.**

Conflict of Interest and Commitment: Annually, all CASL faculty are required to complete the Conflict of Interest and Commitment disclosure through M-Inform. The dean obtains regular reports to confirm that all faculty have disclosed. The dean also sends periodic reminders to faculty who have not completed the disclosure process. CASL has documented COI/COC procedures for faculty, which will be presented to CASL's Administrative Council and to CASL's Executive Committee before the end of the current academic year. UM-Dearborn Human Resources is leading a campus-wide effort to develop a conflict of interest and commitment policy for all UM-Dearborn staff including establishing an annual online certification process. This campus-wide process is expected to be implemented for fiscal year 2016 disclosures.

University Audits tested the completeness of faculty member annual disclosures and identified several faculty members that did not complete their annual disclosure, which per current UM-Dearborn faculty policy was due September 15, 2014. **Open.**

Safety of Minors at CASL: CASL is included in UM-Dearborn's implementation of Standard Practice Guide Section 601.34, *Policy on Minors Involved in University-Sponsored Programs or Programs Held in University Facilities,* which was issued January 13, 2014. A department contact who will respond to any questions related to the SPG has been identified. Department chairs have received training materials. **Closed**.

Agreements with Third Parties: CASL enters into agreements with external entities for a variety of reasons including articulation agreements with local community colleges. CASL has implemented procedures for establishing third-party contracts and agreements. Responsibility for compliance and business practices related to these agreements and maintaining an inventory of these agreements is assigned and an annual monitoring process has been documented. CASL's dean is to present the new procedures to impacted departments by April 2015. University Audits will test the process during the next follow-up. **Open**.

Faculty Course Releases and Stipends: CASL faculty can accrue hours towards a course release or stipend by taking on leadership roles in the college. Currently, there is no limit to the number of hours that can be accrued by a faculty member.

- *Policies:* CASL administration will draft documented procedures for faculty course releases, which the dean will communicate to CASL's Administrative Council and to CASL's Executive Committee with implementation by January 2016. **Open.**
- *Calculation and Tracking:* An inventory of academic year faculty workload has resumed after a one-year interruption. The fiscal year 2014 inventory will be presented to CASL Executive Committee for review by April 2015. **Open.**
- *Banked Time and Duplication of Effort:* CASL is adopting a new model for compensating department chairs and associate deans, which will capture course releases, administrative work effort, and compensation. Additionally, the CASL dean and financial manager are developing the cost measurements and effort calculations for all other course releases. These will be included with new course release and banked time policies and procedures. The model and new course release policies and procedures will be in place by May 2015 and fully implemented by January 2016. **Open.**

Records and Advising

- *Curriculum Changes:* A representative from CASL Advising and Records has been appointed as a non-voting member of UM-Dearborn's newly reconstituted University Curriculum and Degree Committee, which establishes deadlines for curricular change/approval. **Closed**.
- *Graduation Worksheets:* CASL has implemented Degree Works, a software package that includes current discipline-specific graduation worksheets for the college for new incoming students. CASL is creating processes that will allow for accurate graduate information to be readily available to existing students. During the audit, we noted department websites with outdated graduation requirements. Rather than having graduation information in multiple locations, department chairs were asked to include a link on their department's websites directly to the CASL Records and Advising's advising sheets. We reviewed the links and noted that department websites were not consistently linked to these centrally managed sheets. Updated expected completion date is March 2015. **Open.**
- *Faculty Advising:* Degree Works allows for staff and faculty engaged in advising students to see a complete record of notes for each student, which allows for consistent advising. **Closed.**

Roles and Responsibilities: Roles and responsibilities for department chairs have been documented and communicated to the department chairs. The CASL dean is evaluating the roles of the associate deans and new job descriptions will be developed by March 2015. Department chairs will document the roles and responsibilities for each of their discipline chairs. Roles and responsibilities will be reviewed and approved by CASL's Administrative Council and the provost by April 2015. **Open**.

UMHS MiChart Revenue Cycle 2014-112

Report issued July 2013 Follow-up report issued April 2015

University Audits issued an audit report on the U-M Health System MiChart Revenue Cycle in July 2014. The audit focused on billing and collection activities, including write-offs, refunds, and revenue monitoring. The audit was performed in cooperation with the UMHS Compliance Office, which reviewed and tested physician coding.

We recently conducted a follow-up review to assess progress toward completion of corrective action plans. Significant improvements have been made; however, one action plan is not yet fully implemented. The status of completed and open items is summarized below.

University Audits will conduct a second follow-up review in November 2015 to assess progress on the open action item. **This audit remains open.**

Protected Health Information: The patient refund process was not fully compliant with Health Insurance Portability and Accountability Act (HIPAA) standards. To better protect patient information and comply with HIPAA standards, management worked with the UMHS Compliance Office to determine minimum necessary information needed to process refund checks, revised spreadsheet templates used to request refunds, and required staff to use a HIPAA-compliant file transfer system to send refund requests to Accounts Payable. **Closed.**

Reconciliation: Patient account reconciliation processes were not fully developed prior to consolidating the hospital and professional billing platforms to create a single patient statement. Revenue cycle staff, working with an outside consultant and developed a new reconciliation process, which was implemented in November 2014. UMHS Finance reviews and signs off on monthly reconciliations, which are up-to-date November 2014 through January 2015. Management expects to continue improving the reconciliation process by adding more automation, which should reduce manual reconciliation work. Management has asked staff to perform retro reconciliations, using the new process, back to the beginning of fiscal year 2015. **Closed.**

Segregation of Duties: Several key operations were not segregated in a manner that would prevent one employee from executing a transaction from beginning to end without involvement from others. Segregation of duty issues were primarily associated with refund and write-off processes. Management took the following actions to better segregate responsibilities:

- Revised self-pay and insurance refund and write-off procedures
- Developed a process to investigate and void returned refund checks
- Revised payment posting processes for insurance refunds

Management is in the process of reviewing refund and write-off role assignments in EPIC to align roles with employee responsibility. Management expects to complete this review by May 2015. University Audits asked management to adjust refund practices to ensure individuals who initiate, request, or approve refund checks do not have physical access to the checks. We will continue to monitor progress on this action item. **Open.**

Write-off Approval and Review: UMHS had inconsistent practices for reviewing and approving accounts receivable write-offs that could potentially result in lost revenue. Management revised self-pay and insurance write-off procedures. Hospital and professional billing managers now follow the same write-off approval processes in their respective groups. The hospital billing approval processes are automated. Although the billing platform does not offer a fully automated process for physician billing write-off approvals, management developed a manual workflow to help ensure approvals occur at the right management level. In addition, management adjusted approval thresholds and created more levels of approval. **Closed.**

Refund Practices: The patient refund process did not have sufficient controls to detect errors, such as duplicate refunds. Management revised self-pay and insurance refund procedures. Modifications included: a) a new requirement for payment posting management to review and approve refund requests initiated by payment posting staff; and b) the development and implementation of new procedures to manage refunds that fail to post to patient accounts, manage refund checks returned to the facility, and investigate uncashed refund checks. **Closed.**

Physician Coding, including the Use of Coding Modifier 25: Tests performed by UMHS compliance auditors indicated providers and billing staff did not always bill the correct procedure codes and modifiers, or verify that patient medical records contained sufficient documentation to support claims. Management performed the following actions to enhance coding-review practices:

- Reviewed revenue cycle processes for performing physician coding reviews
- Created the Provider Education Program to ensure a continual dedication of resources and focus on physician education
- Created interactive coding education videos for physicians to provide accessible information about coding and other billing information related to inpatient and outpatient care
- Reviewed and corrected, where needed, billing errors reported by the UMHS Compliance Office. The details of other reported findings could not be shared with revenue cycle due to a UMHS Compliance Office computer failure. **Closed.**

UMMS Molecular and Behavioral Neuroscience Institute 2013-401

Report issued May 2013

First follow-up report issued January 2014
Second follow-up report issued August 2015
Third follow-up report issued March 2015

University Audits issued an audit report for the U-M Medical School (UMMS) Molecular and Behavioral Neuroscience Institute (MBNI or institute) in May 2013. University Audits recently performed a third follow-up review to assess progress on three remaining open action plans. Two previous follow-up reviews were completed in January 2014 and August 2014.

The status of open action items is summarized below. Most action plans have been substantially addressed. University Audits will conduct a fourth follow-up review in November 2015 to reevaluate progress on one remaining open action item. **This audit remains open.**

Long-term Financial Viability: From 2009 to 2013, MBNI accumulated a substantial deficit in its general fund account that remains unresolved. The UMMS dean's office and Health System Financial Services are in the process of revising the Medical School financial model for the basic science departments, which should alleviate the MBNI deficit and provide sustainable funding. The UMMS dean's office expects to put the new financial model in place for fiscal year 2016.

In November 2013, the UMMS dean assembled an advisory committee to perform an academic review of MBNI and advise the dean on the status, direction, needs, and optimal structure of the institute. The committee recently completed its review and is in the process of summarizing information and preparing reports.

During our fourth follow-up review, University Audits will review the implemented financial model and committee recommendations as they relate to MBNI's long-term viability and reporting structure. **Open.**

IT Disaster Recovery: MBNI created a Continuity of Operations Plan (COOP) for MBNI IT services and systems and contacted Medical School Information Systems (MSIS) personnel to discuss the potential use of MSIS-designated resources. **Closed.**

IT Incident Response: An incident response plan defines, in specific terms, what constitutes a security incident and outlines processes that should be followed when an incident occurs. MBNI adopted the Security Incident Response Plan used by MSIS and has adapted and implemented the plan at MBNI. **Closed.**

University Library 2014-217

Report issued July 2014 Follow-up report issued March 2015

University Audits issued a report for the audit of the University Library in July 2014. We have conducted a follow-up review to assess progress toward addressing audit recommendations. In May 2014, the new associate university librarian for Library Information Technology (LIT) was hired. Since then, LIT management has embarked on a process to study the internal processes and procedures of the technology division with the goal of reengineer internal practices to better meet library needs. The new finance director for the University Library was hired and began work in September 2014. He started developing policies and procedures, particularly those related to internal controls including cash handling, PCI compliance, and SOA reconciliation. Several of the management action plans have been completed and progress has been made on the others. University Audits will conduct a second follow-up review during the second quarter of fiscal year 2016. **This audit remains open.**

Storage of Collections: The Office of the Provost has assigned the library use of high-quality storage space in North Campus Research Center (NCRC) Building 550. This large, secure, environmentally-controlled building will be shared with several other special collections areas on campus and will meet the immediate space and storage needs identified for special collections.

University Library is working with Architecture, Engineering, and Construction (AEC) to identify how to make the sixth floor of Hatcher (from which special collections will be moved to NCRC) secure and environmentally sound to accommodate a special collections expansion in the future. **Closed.**

Collections Inventory: Procedures for shelf-reading have been documented and communicated. Shelf-reading is conducted as described in the procedures. Procedures have been updated for the withdrawal of library materials. The updated information was shared with relevant staff via the internal newsletter and training. Item status codes have been defined and communicated. The library has compiled an initial inventory of the unprocessed physical collections and continues to work to reduce the backlog. **Closed.**

Cash Handling: The audit found that library management was not providing adequate oversight for cash handling. The library had six decentralized units that collected cash and/or checks. They operated individually with no central oversight or consistency. For the most recently completed Internal Control Certification process, a gap analysis to assess internal controls and identify deficiencies was completed for each location collecting cash and checks. By assessing each location, Library Finance was able to eliminate and condense locations that handle cash and checks where possible. Cash handling procedures have been drafted and are currently under review by financial managers directly affected by the policy. The target date for finalization of the policy is March 2015. An education plan will follow the finalization of the policy. Library management stated they are making every effort to ensure all appropriate staff,

including students, take the cash handling and depository training. They are developing a process to monitor training status throughout the library. **Open.**

PCI Compliance: At the time of the audit, the library had eleven active merchant accounts with activity that did not align with University policy. The Merchant Services Policy Document has been distributed to all units with an active merchant account. An attestation form has been developed that will document that authorized staff have read and understand the Merchant Services Policy Document. Units have been asked to update merchant contact names and ensure all appropriate staff take the annual on-line training. Library Finance will review the merchant contact names and enter them in M-Pathways as required by the Treasurer's Office. Departmental procedures that are consistently applied throughout all units need to be developed. The target date for completion is July 2015. **Open.**

Verification of Equipment Inventory: At the time of the audit, library staff did not maintain an accurate inventory report of equipment valued at over $5,000 as required by Property Control nor did they monitor the equipment inventory valued at below $5,000 that was borrowed by students. The responsibility for verification and update of the equipment inventory report has been moved from Library Finance to Library Operations. Inventory reports are sent out to senior managers once a year so they can verify its accuracy and note items that have not been tagged and should be added to the list. Library Operations and Library Finance are setting up a process so that when large purchases are made, Library Operations can follow up with the unit and Property Control as needed. Library Operations is in the process of identifying information needed so three large pieces of equipment can be added to the inventory report for Property Control.

For equipment items valued below $5,000 that students can borrow, replacement costs have been added to the library records for each item. The library now conducts monthly inventory checks by matching the inventory of equipment on hand with the on-line Mirlyn records. Spot checks of equipment will also be performed. **Open.**

Statement of Activity Reconciliations: Library Finance has determined a reconciliation frequency for all account types and has begun to clear the reconciliation backlog. **Open.**

Disaster Response and Recovery Plan: At the time of the audit, the library had not implemented their written Disaster Response and Recovery Plan, nor had they developed an understanding with other departments about the responsibility for their collections housed in other buildings on campus. Since the audit, the library has committed to updating their Disaster Response and Recovery Plan annually and is also working on:

- Clarifying the differences for Library Executive Council between the different emergency plans (i.e., Building Incident Response Team, Continuity of Operations Plan, Emergency Plan, and Disaster Response and Recovery Plan).
- Developing a written debriefing process for disaster and emergency situations.

- Refining the safety and security workshops to be sure they include regular run-throughs of potential building and collection disasters, and also refining the regular building walk-throughs that are currently conducted in all library buildings.
- Investigating the existence of past MOUs, (memo of understanding) and creating MOUs with other departments where necessary for collections housed in other buildings.
- Working with Risk Management and the Division of Public Safety and Security as a resource for coordination of activities.

To address the audit issues, the department should also:

- Distribute the Disaster Response and Recover Plan to all necessary units and individuals.
- Create an education and awareness program so that all appropriate individuals are aware of the plan, the pertinent steps, and the differences between all the emergency plans.
- Implement all parts of the plan as written or amend the plan as needed.

Open.

Building Access: The audit found that building access for retired and terminated employees was not consistently removed. The library has now updated their processes and procedures for handling access to library buildings including a refined procedure so that Library Human Resources is notified of departing staff. Access reports have been improved and quarterly and random checks are performed to verify that only active personnel have access. The initial check was conducted and regular quarterly checks will start in March 2015. An improved database has also been created to track non-library personnel who need access to library buildings, which will be regularly reviewed. **Closed.**

International Travel Safety: At the time of the audit, library staff did not regularly register their travel with the UM Travel Registry nor did library management offer guidance to international travelers about safe computing before, during, and after traveling. Modifications have been made to the Request for Leave and Travel Funding form where staff are required to check a box verifying they have registered with the Travel Registry and to certify that they have reviewed and understand the information regarding safe computing in high-risk, international areas. No forms will be accepted without the boxes checked. Staff have been educated on the new expectations and requirements for all library staff. **Closed.**

Pay Rate Verification: Gross Pay Register reconciliations will be transitioned to the Shared Services Center. Library Human Resources will monitor the transition of this process and once finalized, will specifically assign review of management reports to the appropriate library units and Library Human Resources staff. **Closed.**

Information Technology Support and Change Management: LIT is in the process of conducting a comprehensive review of the Library Information Technology Division and their internal practices. These efforts are underway and are near 50% complete. Management stated that an outcome of the review will be the formulation of a plan for implementing changes to practices and internal tracking systems.

Throughout the 2014 fall semester, the LIT management team conducted a series of workshops as part of the review of all IT resources and processes. This included an analysis of the major resource areas of the IT division:

- Financial and time budget
- Applications and infrastructure
- Human resources

Reviews completed as of January 2015 include:

- Applications and infrastructure
- Departmental workflow and culture
- Resource distribution and project load
- Internal dependencies and staff network analysis
- IT systems cost vs. sustainability analysis

The subsequent follow-up review will assess management's progress in the development and implementation of the plans that are created as a result of these efforts. **Open.**

Open Audits Follow-up Table
As of April 30, 2015

Audit	Report Date	Open Issues	Follow-Up Memo Issue Target Date
UM-Flint Educational Opportunity Initiatives 2010–211	February 2011	Strategic oversight and guidance; campus support and collaboration; budget and financial management; staff management; event management; business continuity; documentation of policy and procedure	First follow-up April 2012 _____ Second follow-up April 2013 _____ Progress reviewed May 2014 _____ Third follow-up September 2014 _____ Fourth follow-up scheduled for June 2015
UM-Dearborn College of Engineering and Computer Science 2012-302	June 2012	Financial oversight; documented policies and procedures; gift handling and monitoring	First follow-up April 2014 _____ Second follow-up February 2015 _____ Third follow-up scheduled for September 2015
Residential Dining Service 2012-216	November 2012	Financial metrics; CBORD inventory	First follow-up September 2013 _____ Second follow-up March 2014 _____ Third follow-up October 2014 _____ Fourth follow-up scheduled for May 2015

Audit	Report Date	Open Issues	Follow-Up Memo Issue Target Date
Medical Center Information Technology and Arbor Lakes/North Campus Data Centers 2012-307	April 2013	MCIT Managed Data Centers lack a comprehensive continuity of operations plan. Note: This issue requires long-term corrective actions and planning efforts are ongoing.	COOP Meetings June 2013 September 2013 _____ First follow-up March 2014 _____ Second follow-up September 2014 _____ Third follow-up January 2015 _____ Fourth follow-up scheduled for August 2015
Molecular and Behavioral Neuroscience Institute 2013-214	May 2013	Long-term financial viability	First follow-up January 2014 _____ Second follow-up August 2014 _____ Third follow-up March 2015 _____ Fourth follow-up scheduled for November 2015
Office of Student Publications 2013-203	July 2013	Strategic plan and vision; documented policies and procedures; training; procurement contracts	First follow-up June 2014 _____ Second follow-up February 2015 _____ Third follow-up scheduled for September 2015

Audit	Report Date	Open Issues	Follow-Up Memo Issue Target Date
School of Natural Resources and the Environment 2012-210	September 2013	Effort certification; admissions documentation; lab safety; documented processes	First follow-up June 2014 _____ Second follow-up February 2015 _____ Third follow-up scheduled for September 2015
UM-Dearborn College of Arts, Sciences, and Letters 2013-204	September 2013	Conflicts of interest/ conflicts of commitment; agreements with third parties; faculty course releases and stipends; roles and responsibilities	First follow-up June 2014 _____ Second follow-up March 2015 _____ Third follow-up scheduled for October 2015
UM-Dearborn Office of Financial Aid 2013-201	September 2013	Conflicts of interest or commitment	First follow-up June 2014 _____ Second follow-up February 2015 _____ Third follow-up scheduled for September 2015
College of Engineering Research Software Licensing 2013-310	October 2013	Software licensing and usage; software for commercial research; acceptance of “click-through” licenses; tracking of software licenses in nanotechnology labs; creation of a research lab; definition of PhD student; recording software purchases to program codes; classification of software purchases	First follow-up April 2014 _____ Second follow-up October 2014 _____ Third follow-up scheduled for May 2015

University Audits
Summary of reports issued – March 1 through April 30, 2015

Audit	Report Date	Open Issues	Follow-Up Memo Issue Target Date
Donor and Alumni Relationship Tool (DART) 2013-106	October 2013	Changes to the default master encryption password; Office of University Development dev/net web application security; DART web application security; network vulnerabilities; terminations and periodic review of user access; organization of key information; assignment and completion of project tasks; ongoing user training; use of help desk questions; system metrics	First follow-up June 2014 _____ Second follow-up originally scheduled for March 2015; rescheduled for May 2015
Financial Operations Cost Reimbursement Office Effort Certification Process 2013-501	January 2014	Maximum allowable effort on federal projects; data validation	First follow-up October 2014 _____ Second follow-up scheduled for May 2015
Department of Chemistry 2013-212	March 2014	Recharge billing; facility access and security; support for lab fees; system configuration documentation; chemical inventory documentation; inaccurate asset inventory records	First follow-up February 2015 _____ Second follow-up scheduled for September 2015
Export Controls 2014-404	April 2014	Governance; recordkeeping; education and training; Lack of return or destroy procedures; foreign nationals; IT security; overseas travel	First follow-up November 2014 _____ Second follow-up scheduled for June 2015
MiServer 2012-314	April 2014	Service level expectation	First follow-up November 2014 _____ Second follow-up scheduled for May 2015

Audit	Report Date	Open Issues	Follow-Up Memo Issue Target Date
UM-Dearborn Information Technology Services 2014-216	May 2014	Vulnerability detection and remediation; malware detection and remediation; account provisioning and de-provisioning; network segmentation; software asset management ; it disaster recovery and business continuity; it change management; fixed asset management ; P-Card review process; management reports; conflict of interest/ commitment	First follow-up February 2015 _____ Second follow-up scheduled for September 2015
School of Dentistry 2014-215	May 2014	Credentialing; adjunct onboarding and oversight; additional compensation payments; conflict of interest and conflict of commitment; student discount eligibility verification; graduate program admission	First follow-up March 2015 _____ Second follow-up scheduled for October 2015
General Laboratory Safety 2014-401	July 2014	Safety culture; oversight and monitoring; defining the lab population and identifying hazards; training and education; monitoring reports and trend analysis; safety role definitions; communication and awareness	First follow-up March 2015 _____ Second follow-up scheduled for September 2015
Student Domestic Travel – Sponsored Teams and Groups 2013-110	July 2014	Process owner; policy and guidance	First follow-up March 2015 _____ Second follow-up scheduled for October 2015
Administrative Services Transformation Shared Services Vendor Selection and Payment 2014-812	July 2014	Contract change orders – approval; conflict of interest/conflict of commitment - management plans; contract change orders - delegated authority; non-competitive purchasing	Follow-up originally scheduled for February 2015; rescheduled for May 2015
Bentley Historical Library 2014-201	July 2014	Detroit Observatory; security of facilities; contract oversight; DRP; environmental controls in archives; insurance for fine art; collection backlog management; time reports and travel expenses	First follow-up March 2015 _____ Second follow-up scheduled for October 2015

Audit	Report Date	Open Issues	Follow-Up Memo Issue Target Date
University of Michigan Health System MiChart Revenue Cycle 2014-112	July 2014	Segregation of duties	First follow-up April 2015 _____ Second follow-up scheduled for November 2015
University Library 2014-217	July 2014	Cash handling; PCI compliance; verification of equipment inventory; Statement of Activity reconciliations; disaster response and recovery plan; IT change management; IT support management	First follow-up March 2015 _____ Second follow-up scheduled for October 2015
Office of Technology Transfer 2014-213	August 2014	Documentation of key procedures; work procedure efficiencies	Follow-up originally scheduled for March 2015; rescheduled for June 2015
Social Media 2013-307	August 2014	Social media strategy; acceptable use guidelines; training and awareness	Follow-up originally scheduled for March 2015, rescheduled for September 2015
Sponsored Programs Office of Contract Administration 2014-502	September 2014	Subrecipient monitoring roles and responsibilities; subrecipient eligibility requirements	First follow-up April 2015 _____ Second follow-up scheduled for November 2015
School of Education 2014-209	September 2014	Affiliation agreements; fire alarm system; risk evaluation of computers on open networks (RECON) – security issues; graduate and undergraduate grade changes; equipment tracking – research incentive and discretionary funds; building keys and M-Cards; conflict of interest and conflict of commitment; joint appointments	Follow-up originally scheduled for April 2015; rescheduled for May 2015
Payment Programs for Research Subject Incentives 2012-501	September 2014	Tax reporting compliance; internal control and operational efficiency; HSIP procedures; enhancing training; updating University policy; system compliance monitoring; third party vendors	Follow-up originally scheduled for April 2015; rescheduled for May 2015

Audit	Report Date	Open Issues	Follow-Up Memo Issue Target Date
Museum of Zoology 2014-208	September 2014	Import and export permits; handling hazardous materials; documentation of key procedures; key management; management of artwork	Follow-up originally scheduled for April 2015; rescheduled for May 2015
Remote and Telecommuting Employees 2014-110	October 2014	Remote/telecommuting policy; remote/ telecommuting resources and guidance; remote/telecommuting population	Follow-up scheduled for May 2015
UM-Dearborn Athletics 2014-214	October 2014	Varsity sports compliance; classification of club sports; children on campus; liability protective measures; facility rental contracts and accounts receivable; hiring of relatives; monitoring and approving employee time worked; cash handling and credit card management	Follow-up scheduled for May 2015
Biomedical Engineering 2014-301	October 2014	Medical device security; user access controls; audit logs; IT documentation; protected health information removal; preventative maintenance scheduling; statement of activity reconciliation; part inventory management; personnel procedures	Follow-up scheduled for May 2015
U-M Health System Office of Clinical Safety 2014-211	November 2014	Protected health information; payment processes; system access and documentation; inconsistencies in claims information; quality reviews; patient grievances	Follow-up scheduled for June 2015
Pathology Laboratory Information System 2014-305	December 2014	Security vulnerabilities; IT documentation of key procedures; LIS user access controls	Follow-up scheduled for July 2015
Plant Operations Key Office 2014-109	February 2015	Roles and responsibilities; building security; key distribution; key returns; security procedures; cash controls; hardware inventory	Follow-up scheduled for September 2015
School of Information - Information Technology Report 2015-211	February 2015	Vulnerability detection and remediation; system and change management; account provisioning and access management; password management; firewall; physical security; hardware and software asset management	Follow-up scheduled for September 2015

Audit	Report Date	Open Issues	Follow-Up Memo Issue Target Date
UMHS IT Governance 2014-303	February 2015	IT and overall governance structures; IT within UMHS; authority to govern IT; IT shared services; coordination of IT at UMHS; relationship with the University of Michigan IT community	Follow-up scheduled for September 2015
Online Access Request System 2014-111	February 2015	Unit liaisons requesting access for themselves; unit liaison training; unit transfers; roles and role descriptions; review of access requests; OARS continuity of operations plan	Follow-up scheduled for September 2015
Department of Pathology 2015-210	March 2015	MLab agreements; MLabs revenue cycle; equipment management; off-boarding process; annual code of conduct attestation; faculty compensation model	Follow-up scheduled for October 2015
Museum of Anthropological Archaeology 2015-209	April 2015	Management of collections; collaborative agreements; permits; OSEH compliance monitoring; travel oversight; access management	Follow-up scheduled for November 2015
Department of Biological Chemistry 2015-208-2	April 2015	Sensitive institutional data; monitoring conflict of interest; research investigators; effort certification	Follow-up scheduled for November 2015
Medical School Department of Pharmacology 2015-208-3	April 2015	Sensitive institutional data; recharge activity	Follow-up scheduled for November 2015
Medical School Department of Surgery Division of Anatomical Sciences 2015-102	April 2015	Inventory management and recordkeeping; anatomical donations database; management of specimen loans; recharge and rebill services; security of sensitive data; escalating non-compliance or other concerns; documented policies and procedures; updating and approving legal agreements and forms; documented agreements	Follow-up scheduled for November 2015

Appendix 1: Audit Issue Risk Definitions

Risk	Definition
High	• Describes a control breakdown with a combination of potential impact and likelihood of occurrence to create **significant risk** to the audited entity. A high-risk issue generally requires **immediate** corrective action, or implementation of an interim control to minimize the risk until permanent corrective actions occur. • A high-risk issue could be a repeat medium-risk issue (i.e., during the last audit, the same issue was reported, but was not corrected on a sustainable basis).
Medium	• Describes a control breakdown with a combination of potential impact and likelihood of occurrence to create **enough risk** to require corrective action **within six months**. • A medium-risk issue could be a repeat low-risk issue (i.e., during the last audit, the same issue was reported, but was not corrected on a sustainable basis).

Appendix 2: Audit Issue Follow-Up Process

High and Medium Risk Issues: Every three months until completed, unit management should report the status of their action plans to University Audits. At six months, and every six months thereafter until the actions are completed, University Audits will conduct follow-up procedures to verify the actions are complete and are effectively managing the risk. University Audits will summarize the results of each six-month follow-up review in a written memo.

Low Risk Issues: Unit management is expected to address all low risk issues, which may be reviewed during our next audit. However, a status update is not required and University Audits will not conduct follow-up procedures.