CONFIDENTIAL SUMMARY AIC COMMITTEE OF THE BOARD OF VISITORS MAY 13, 2021 OPEN SESSION

ACTION ITEMS:

- Approval of FY2022 Audit Workplan
- Approval of FY2022 University Ethics and Compliance Program Initiatives

FOR INFORMATION/COMMITTEE REVIEW:

- 1) Items that may be action items at upcoming committee meeting:
 - None

2) Items that the board needs to be aware of, but will not require action (all linked here)

- Dashboard Measures: Review the committee dashboard that provides a snapshot of relevant oversight areas.
- Status Report of Prior Findings: Report on the completion of corrective action plans due since
 the last committee meeting. The committee requested this update as a regular agenda item
 until all past due findings reported in September 2020 are resolved. One finding due this
 quarter and it was resolved and is considered closed.
- Outside Professional Activities audit report: Audit is in the final stages so this will need to be updated with outcomes in late April.
- VCU Life Sciences audit report: All audit objectives concluded positively and there are no Board level audit findings.
- Handout Only:
 - a. Audit Work Plan Status FY21 This handout provides the committee with information regarding the completion of the approved audit plan.

EXECUTIVE REPORTS

- Mr. Reinholtz, audit director with the Virginia Auditor of Public Accounts will meet with the
 committee to discuss the FY2021 annual financial statement and compliance audit of the
 university. Topics covered will include audit timing, scope and objectives, management
 responsibilities, and auditor responsibilities.
- Ms. Helderman will briefly cover the Dashboard Measures, Status Report of Prior Findings, and the audit reports as listed above. Most current presentation linked.
- Mr. Briggs will provide an update regarding VCU's Enterprise Risk Management (ERM) program and planned activities



VIRGINIA COMMONWEALTH UNIVERSITY AUDIT, INTEGRITY AND COMPLIANCE COMMITTEE MEETING MAY 13, 2021

JAMES BRANCH CABELL LIBRARY RICHMOND, VIRGINIA AGENDA

1. CALL TO ORDER

Shantaram Talegaonkar, Chair

2. ACTION ITEMS:

a. Approval of Minutes March 5, 2021

b. Proposed FY2022 Audit Workplan

c. Proposed FY2022 University Ethics and Compliance Program Initiatives

Karen Helderman, Executive Director, Audit and Compliance Services

FOR INFORMATION:

3. AUDITOR OF PUBLIC ACCOUNTS (APA)

FY2021 AUDIT ENTRANCE CONFERENCE Auditor of Public Accounts

4. REPORT FROM EXECUTIVE DIRECTOR OF AUDIT AND COMPLIANCE SERVICES

a. Committee Dashboard Measures

b. Status Report of Prior Findings

c. Audit Report: VCU Life Sciences

d. Policy Management

e. Handout: Audit Work Plan Status FY21

Mike Reinholtz, Director Auditor of Public Accounts

Karen Helderman, Executive Director, Audit and Compliance Services

5. ENTERPRISE RISK MANAGEMENT UPDATE

Tom Briggs, Assistant Vice President, Safety and Risk Management

6. CLOSED SESSION

Freedom of Information Act Section 2.2-3711 (A) (7) and (19), specifically:

A. Audit Reports for Discussion
Active Directory Management

B. University Counsel Litigation Update

Karen Helderman, Executive Director Audit and Compliance Services

Jake Belue, Associate University Counsel

7. RETURN TO OPEN SESSION AND CERTIFICATION

 Approval of Committee action on matters discussed in closed session, if necessary Shantaram Talegaonkar, Chair

8. ADJOURNMENT

Shantaram Talegaonkar, Chair

CONFIDENTIAL SUMMARY AIC COMMITTEE OF THE BOARD OF VISITORS MAY 13, 2021 OPEN SESSION

ACTION ITEMS:

- Approval of Minutes from March 5, 2021
- Approval of FY2022 Audit Workplan
- Approval of FY2022 University Ethics and Compliance Program Initiatives

FOR INFORMATION/COMMITTEE REVIEW:

- 1) Items that may be action items at upcoming committee meeting:
 - None

2) Items that the board needs to be aware of, but will not require action (all linked here)

- Dashboard Measures: Review the committee dashboard that provides a snapshot of relevant oversight areas.
- Status Report of Prior Findings: Report on the completion of corrective action plans due since
 the last committee meeting. The committee requested this update as a regular agenda item
 until all past due findings reported in September 2020 are resolved. One finding due this
 quarter and it was resolved and is considered closed.
- VCU Life Sciences audit report: All audit objectives concluded positively and there are no Board level audit findings.
- Policy Overview: A discussion of policy management at VCU
- Handout Only:
 - a. Audit Work Plan Status FY21 This handout provides the committee with information regarding the completion of the approved audit plan.

EXECUTIVE REPORTS

- Mr. Reinholtz, audit director with the Virginia Auditor of Public Accounts will meet with the committee to discuss the FY2021 annual financial statement and compliance audit of the university. Topics covered will include audit timing, scope and objectives, management responsibilities, and auditor responsibilities.
- Ms. Helderman will briefly cover the Dashboard Measures, Status Report of Prior Findings, the audit reports as listed above, and an overview of policy management. Most current presentation linked.
- Mr. Briggs will provide an update regarding VCU's Enterprise Risk Management (ERM) program and planned activities



Board of Visitors Audit, Integrity and Compliance Committee 8:00 a.m. March 5, 2021 James Cabell Library 901 Park Avenue, Room 303, Richmond, Virginia

Minutes

COMMITTEE MEMBERS ABSENT

OTHERS PRESENT

CALL TO ORDER

APPROVAL OF AGENDA

APPROVAL OF MINUTES

Virginia Commonwealth University Board of Visitors Audit, Integrity and Compliance Committee March 5, 2021 Minutes

Audit, Integrity and Compliance Committee Dashboard Measures

Karen Helderman presented the current status of the dashboard measures. Indicators for Data Security, ERM Program and Ethics and Compliance Program Oversight were yellow and other indicators were green.

Report from the Executive Director of Audit and Compliance Services

Karen Helderman reported on the completion of corrective action plans related to the FY20 Annual Report of Past Due Findings that were due since the last committee meeting.

Audit Update for Information

Karen Helderman reported that the School of Medicine audit report was issued and that all objectives concluded positively and there were no board level findings.

CLOSED SESSION

On motion made and seconded, the Audit, Integrity, and Compliance Committee of the Virginia Commonwealth University Board of Visitors convened into closed session under Section 2.2-3711 (A)(7) and (8), of the Virginia Freedom of Information Act for consultation with legal counsel pertaining to specific legal matters requiring legal advice by counsel and actual or probable litigation, where such consultation of briefing in open meeting would adversely affect the negotiating or litigating posture of the university, namely a survey of and status report on the university's positions in potential and current litigation in state and federal courts and other legal matters relating to pending investigations; and under Section 2.2-3711 (A)(19) for discussion of specific cybersecurity vulnerabilities and briefing by staff concerning actions taken to respond to such matters, specifically pertaining to human subjects research data and related IT processes.

RECONVENED SESSION

Following the closed session, the public was invited to return to the meeting. Dr. Talegaonkar, Chair called the meeting to order. On motion duly made and seconded the following resolution of certification was approved by a roll call vote:

Resolution of Certification

BE IT RESOLVED, that the Audit, Integrity, and Compliance Committee of the Board of Visitors of Virginia Commonwealth University certifies that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements under this chapter were discussed in the closed meeting to which this certification resolution applies, and (ii) only such public business matters as were identified in the motion by which the closed session was convened were heard, discussed or considered by the Committee of the Board.

<u>Vote</u> <u>Ayes</u> <u>Nays</u>

Mr. Keith Parker, Rector

Χ

Virginia Commonwealth University Board of Visitors Audit, Integrity and Compliance Committee March 5, 2021 Minutes

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All members responding affirmatively, the motion was adopted.

ADJOURNMENT

Proposed Three Year Audit Workplan

FY22	FY23	FY24
Grants & Contracts - State and Local	Financial Aid SCHEV Reporting	Faculty Workload Analysis
School of Education Child Development Center	Export Controls	Student Organizations
Banner Controls - AP and General Ledger	ERM RMM Plan Evaluation	Federal Work Study Spending
SOC Reports - Integrated	Foreign Influence	Course Substitution Process
Unused Scholarships	Postdocs	Faculties and Administrative Cost Recoveries
Steam Plant Billing & Allocation	Online Distance Learning Controls	Deferred Maintenance
HS & VCU Operations & Services Agreement	Student-athlete name, image & likeness; NCAA review	HR - Compensation and Classification
External Memorandums of Understanding	Budget Process - part 2	VCU Card Office
Various Fiscal & Administrative Reviews	Various Fiscal & Administrative Reviews	Various Fiscal & Administrative Reviews
Various Petty Cash Audits	Various Petty Cash Audits	Various Petty Cash Audits
IT Audits:	IT Audits:	IT Audits:
Third-Party Management/SOC Reports	Software Asset Inventory	Massey Cancer Center
Physical Access Management (CBORD)	Research Computing/High Performance Computing Security & Data Storage	Centers and Institutes Technical Review
COVID Data Security	Google G-Suite	Business Continuity Planning
Titanium System Review	School of Pharmacy	College of Humanities and Sciences
Maxient System Review	Axium System Review	Pyramed/QS1 System Review
Data Integrity - Database Security and Controls Review	Millenium System Review	Sunapsis System Review
	Tableau Usage and Security	Web Services and Applications Security Review
Prior Year Carryover:		

Social Media

Procurement & Payment

IT - Identity Access Management System

Virginia Commonwealth University Audit, Integrity and Compliance Committee Entrance Conference May 13, 2021

1. APA audit team and resources

Project Manager – J. Michael Reinholtz (<u>mike.reinholtz@apa.virginia.gov</u>) In-Charge – Chuck Schauvliege (<u>chuck.schauvliege@apa.virginia.gov</u>)

- 2. Audit timing Our Office's workplan requires completion of the Universities that are material to the Commonwealth's Annual Comprehensive Financial Report (UVA, VCU, and VT) in the fall of each year.
- **3. Timeline of the audit completion** We will begin control and transaction testing in the late spring and will complete substantive testing during the fall. We will also test the consolidation of the VCU Health System Authority and Foundations' financial information as part of the University financial statement audit process. Our anticipated deadline is November 2021.
- **4. Audit objectives** Our main audit objective is to provide an opinion on the University's financial statements. More specifically, our audit objectives include:
 - Ensuring the financial statements present fairly the financial position, the changes in financial position, and the cash flows for the period under examination in conformity with accounting principles generally accepted in the United States;
 - Determining whether the University has adequate internal control over financial reporting sufficient to mitigate the risk of material misstatements; and,
 - Determining compliance with significant laws, grants, and provisions of contract agreements.
- **5. Statewide single audit support** During the audit, we will also be auditing the federal student financial aid programs to support our statewide single audit. Detailed compliance and control audit work in this area is performed based on a statewide cycle.
- **6. Audit scope** We do not review all transactions or accounts in detail. We use materiality to focus our work on those financial statement line items and those transactions that are material or significant to the University. We will issue a report on internal controls and compliance that will include any findings or recommendations that we identify as a result of the audit.
- 7. Discussion of Risk with Board Members The APA encourages the Board of Visitors to provide input regarding the risks they perceive to the University in completing its mission. Board members can direct their questions and comments to the APA Project Manager, or to the Executive Director of Audit and Compliance Services. During the audit we plan to communicate directly with the Audit Committee Chair to discuss the following:
 - Any areas of fraud risk
 - Any areas of institutional risk
 - Any matters that the Board believes should be considered in planning



Required Communications with the Board

Responsibilities during the audit process:

• The Auditor's (APA) Responsibilities

Overall Audit Objectives

The objective of our audit is the expression of opinions as to whether your basic financial statements are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles. We will conduct our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and standards for financial audits contained in the *Government Auditing Standards*. The audit of the financial statements does not relieve management or those charged with governance of their responsibilities.

Audit Procedures-General

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We will plan and perform the audit to obtain reasonable, rather than absolute assurance, about whether the financial statements are free of material misstatement whether from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the entity or to acts by management or employees acting on behalf of the entity. Because the determination of abuse is subjective, *Government Auditing Standards* do not expect auditors to provide reasonable assurance of detecting abuse.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements may not be detected exists, even though the audit is properly planned and performed in accordance with GAAS and *Government Auditing Standards*.

o Audit Procedures-Internal Control and Compliance

Our audit will include obtaining an understanding of internal controls, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. An audit is not designed to provide assurance on internal control or to identify significant deficiencies or material weaknesses. However, we will communicate in writing to management and those charged with governance any significant deficiencies or material weaknesses in internal control relevant to the audit of the financial statements that we have identified during the audit. Also, as part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of compliance with the provisions of applicable laws, regulations, contracts, agreements, and grants

Audit Procedures – Group Audits

Our audit will include obtaining an understanding of the consolidated group, sufficient to assess the risks of material misstatement of financial information derived from significant components to design the nature, timing, and extent of further audit procedures, including the basis for the decision to make reference in our audit opinion to audits of significant components performed by other auditors.

Those charged with governance

We are responsible for communicating significant matters related to the financial statement audit that are, in the auditor's professional judgment, relevant to the responsibilities of those charged with governance in overseeing the financial reporting process. GAAS do not require the auditor to design procedures for the purpose of identifying other matters to communicate with those charged with governance.

Management's Responsibilities

Our audit will be conducted on the basis that Management and those charged with governance acknowledge and understand that they have the following responsibilities:

- Preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America
- Design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error
- o Identify and ensure compliance with applicable laws, regulations, contracts, and grant agreements
- o Informing the APA about all known or suspected fraud affecting the entity involving (1) management, (2) employees who have significant roles in internal control, and (3) others where the fraud could have a material effect on the financial statements
- Informing the APA (and others as required by the Code of Virginia § 30-138) of knowledge of any allegations of fraud or suspected fraud affecting the University received in communications from employees, former employees, regulators, or others
- As received, forward copies of each federal audit performed on institution programs or activities to the Auditor of Public Accounts as required by Chapter 836 § 4-8.02 a. of the 2017 Virginia Acts of Assembly.
- o Informing the APA of any potential documents that are FOIA exempt
- o Ensuring that management is reliable and financial information is reliable and properly recorded
- Making all financial records and related information available to the APA
- Providing the APA with (1) access to all information of which you are aware that is relevant to the preparation and fair presentation of the financial statements, (2) additional information that we may request for the purpose of the audit, and (3) unrestricted access to persons within the government from whom we determine it necessary to obtain audit evidence
- Responding to audit findings and recommendations, as well as providing planned corrective actions and the timing and format for providing that information
- Providing the APA at the end of the audit with a written letter confirming certain representations made during the audit
- Adjusting the financial statements to correct material misstatements and providing the APA with
 a representation that the effects of any uncorrected misstatements are immaterial, both
 individually and in the aggregate, to the financial statements taken as a whole
- For Group audits, management is responsible for the following:
 - Informing the component's management of any matter that the group engagement team becomes aware that may be significant to the financial statements of the component, but of which component management may be unaware.
 - Implementing procedures to determine if there are subsequent events for components through the APA's audit report date.

- Implementing procedures to identify and disclose the component's related parties and related party transactions.
- Implementing policies and procedures related to the consolidation of group financial information.

• Audit, Integrity and Compliance Committee

- Communicate with APA about audit scope
- Communicate with management and internal audit regarding progress
- o Receive reports and findings from management and external audit

Other Elements of the audit process:

• Overall planned scope of the audit

- Approach to internal control We review internal controls to identify those areas where we can replace substantive testing with transactional testing. We look for management to have written formal policies and procedures and check for the implementation of those procedures.
- Concept of materiality We do not review all transactions or accounts in detail. We use
 materiality to focus our work on those financial statement line items and those transactions that
 are material or significant to the University.

• Identification of potential fraud risks

- Approach to fraud Most of our audit is focused on our opinion on the financial statements and materiality. Our primary interest related to fraud would be in how it may affect the financial statements and those controls that the financial statements rely upon. The audit is not designed to detect error or fraud that is immaterial to the financial statements. However, we review policies and procedures for fraud risk and may direct our testwork towards addressing fraud risk.
- Responsibility for identifying fraud risks and fraud Auditing standards require us to assess fraud risk, interview management and staff about their knowledge of fraud and fraud risk, and review exceptions for indications of possible fraudulent transactions. Auditors should be looking for red flag fraud indicators. Even though government entities are not always profit oriented, the auditors remain vigilant about financial statement fraud.
- Report fraudulent transactions as required by Code of Virginia § 30-138 Agencies are responsible for reporting circumstances that suggest a reasonable possibility that a fraudulent transaction has occurred involving funds or property under their control, where an officer or employee of the state or local government may be involved. Items should be reported to the Auditor of Public Accounts, the State Inspector General, and the Superintendent of State Police.

Audit Reporting

 We will issue a written report upon completion of our audit of the University's financial statements. We will make reference to the Component Auditor's audit of the Virginia Commonwealth Health System Authority, and the University's Foundations in our report on the University's financial statements. Our report will be addressed to the Board of Visitors of the University. We cannot provide assurance that an unmodified opinion will be expressed. Circumstances may arise in which it is necessary for us to modify our opinion or add an emphasis-of-matter or other-matter paragraph(s). If our opinions on the financial statements are other than unqualified (unmodified), we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed opinions, we may decline to express opinions or to issue a report as a result of this engagement.

• We will also provide a report (that does not include an opinion) on internal control related to the financial statements and compliance with the provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a material effect on the financial statements as required by *Government Auditing Standards*. The report on internal control and compliance will include a statement that the report is intended solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Audit Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

AUDIT, INTEGRITY, AND COMPLIANCE COMMITTEE DASHBOARD MEASURES

INFORMATION TECHNOLOGY GOVERNANCE - DATA INTEGRITY



DATA GOVERNANCE PROGRAM (development of program)

Program progressing successfully

Barriers / challenges encountered that may have an impact on issue resolution or implementation. Executive Council to resolve challenge.

The Student Data Warehouse project will be guided by business needs. Therefore, stakeholders are providing business requirements through focus group sessions. The sample groups consist of SEMSS Functional Leaders, Data Analysts, Academic Unit consumers of data, Data Stewards, and Data Trustees. The sessions were framed with four guiding questions pertaining to 1) Most often asked data/information questions; 2) Data/Information gaps; 3) Examples of data/information that gives you pause; 4) Impactful integration points for student data.

Significant challenge encountered; will require decision from Executive Leadership Team to resolve



DATA SECURITY (number of security incidents / breaches)

No data breaches have occurred or seem likely to occur; security risks are well understood and being mitigated; resources viewed as aligned with threat and risk environment

No breach has occurred, but minor security incidents or near-misses have occurred; significant audit findings have occurred but are being mitigated; some overload or barriers / challenges encountered that may require adjustment or reallocation of resources

Significant breach requiring notification has occurred or conditions exist where significant barriers/challenges are likely to produce unacceptably high levels of risk

During the first half of 2021, VCU has detected an increased number of phishing scams continuously targeting individuals with gift card scams and scams intended to steal credentials. We continue to see increased reporting of security issues and scams and a corresponding reduced amount of time variance between reception and reporting of issues/scams, which we attribute to our Security Heroes program as well as increased awareness from training and communication. We continue to make progress in: Monitoring for legacy and insecure technology, enhancing our vulnerability management program, working with business units in mitigating risks and vulnerabilities, and removing these when possible. Implementing and increasing enterprise-wide adoption of a centralized patch management and backup capabilities to mitigate vulnerabilities and the risk of ransomware and other cyberattacks.

Revision of information security policies, procedures, and configuration standards to align with industry best practices and regulatory requirements. Developing revised infrastructure and security plans to accommodate consistent service delivery and information security in a hybrid and remote post-pandemic environment.

Designing a consistent high-security data storage and processing environment for sensitive administrative and research environments to meet new and existing regulatory requirements. Current and emerging risks we are tracking include: Continued/expanded remote work reduces central control of devices and makes network-level security less effective. Plans are being developed to address this deficiency. Increased ingestion of data from growing centralized security systems and sensors has challenged our monitoring/analysis capacity. We are planning on the possibility of having to shift resources to manage this. The increasing adoption of third-party service providers combined with a new trend of supply chain based attacks (e.g. Solarwinds, Blackbaud, etc) has increased focus on third-party service security and compliance management. The targeting of core infrastructure components and supply chains by sophisticated cyber adversaries has led to the review and revision of protection strategies for core infrastructure components.

ERM PROGRAM



Status of ERM mitigation plans

Program progressing on schedule

Program not on schedule; ERM Committee to address.

Program significantly behind schedule; Executive Management attention required.

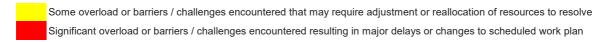
Consultant has been revising the Origami software to better support the risk review process. In addition the ERM Steering Committee met in May of 2021 to discuss and approve changes to the ERM definitions and process of risk identification and review. Next steps include: 1. Meet with risk owners to review new process (May-June); 2. Meet with risk owners to revise and/or update Risk Mitigation Plans and update scores in Origami software (June-Sept); 3. Steering Committee to discuss and approve risk mitigation plans (Oct-Dec).

PLANNED AUDIT STATUS

PLANNED AUDITS (status of audits - planned and unplanned to available resources)

SPECIAL PROJECTS (status of special projects - planned and unplanned to available resources)





Two planned audits will not be completed as planned due to staffing resource issues, such as unexpected and lengthy short term disability. These two audits have been shifted to the FY2022 workplan to resolve the barrier.

INSTITUTIONAL COMPLIANCE PROGRAM

Com	pliance requirements compared to known material violations					
Compliance Program Oversight & Effectiveness						
	No known material noncompliance; or ownership and accountability for compliance risks are established and operating at explicitly or implicitly approved levels of risk tolerance or appetite					
	Challenges encountered that have an impact on visibility, verficiation, strategy implementation or resolution					
	Significant challenges to institutional compliance strategy or resolution encountered					

Notes: There are no known material compliance violations as related to regulatory, legal or univerity policies.

Audit and Management Services

March 2021 Status of Outstanding Audit Recommendations Reported to BOV in September 2020

Report Date	Audit	Outstanding Audit Recommendations Reported to BOV in September 2020 Target Date						Management-Reported Status		
Report Date	e Audit Board Level Recommendations	Board Level Recommendations	Original	Revised	Second Revised Target Date		BOV Approved Extension	Date Management Reported as Resolved	Date Audit Validated Completion	as of March 31, 2021
Jul-18	School of Dentistry	Improve Physical Access Management	Jul-19	Dec-19	12/1/2020 3rd revised data: July 31, 2021	Dec-20	Jul-21	N/A	N/A	Most recent target date of 12-31-20 passed and management requested an extension to July 31, 2021. Dentistry is working with Campus Card Services (CCS) to retrofit their external card readers to the new CBORD system. Currently, the Perkinson building is complete but Wood and Lyons are not. CCS removed Wood and Lyons from their retrofit schedule due to Dentistry's plans to transition to the Adult Outpatient Facility. Since that is not occurring, CCS submitted a budget request with Meredith Weiss to retrofit the Wood and Lyons buildings. Dentistry is also waiting on quotes from CCS and Facilities to add CBORD card readers to sensitive and high priority internal doors and new KeyPer systems to manage physical keys. Much of the work is contingent on receiving a budget approval and Brian Canaday, CIO and Business Manager, plans to discuss the options with Dr. Kellermann in more detail once he receives the guotes.
		Management Level Recommendations								Renermann in more detail once he receives the duotes.
Feb-18	College of Humanities and Sciences	Improve Record Management Processes	Dec-18	Sep-19	Jan-21 3rd revised date: Sep-21	Jan-21	Sep-21	N/A	N/A	Audit testing to occur in October.
Feb-18	College of Humanities and Sciences	Perform Banner Reconciliations and Close Inactive Indexes	Dec-18	Dec-19	Jan-21 3rd revised date: Sep-21	Jan-21	Sep-21	N/A	N/A	Audit testing to occur in November (which would allow for the reconciliations to be completed in October after the September target date).
Mar-18	School of the Arts in Qatar	Perform Monthly Banner Reconciliations Timely and Ensure Departments Review for Propriety	Mar-18	Dec-19	May-20 3rd revised date: Feb-21	Feb-21	N/A	N/A	N/A	Audit testing cleared issue.

Past due, most recent target date has passed.

Past due, most recent target date has not yet passed.

Cleared.



VCU Life Sciences

Final Report April 12, 2021

Audit and Compliance Services

Overview

VCU Life Sciences (Life Sciences) offers bachelor and master degrees in the field of environmental studies, bioinformatics and a doctorate in integrative life sciences. Life Science's research centers are the Center for Environmental Studies, Center for the Study of Biological Complexity and VCU Rice Rivers Center (RRC). Life Science's expense budget was approximately \$13,630,000 and \$14,418,000 in fiscal years 2020 and 2021, respectively, and employed approximately 60 faculty and staff.

Partnerships

Each center under Life Sciences has a number of internal and external partnerships. RRC's focus is on large river ecosystems, their riparian habitats and associated wetlands. Additionally, the center performs studies on terrestrial plant and animal communities. RRC's external partnerships include federal, state and local governments; universities; non-governmental organizations; tribes; and other private and public organizations. The majority of these partnerships are funded by state or private donors.

RRC's partnership with Blue Sky Fund would qualify as a hosted program under the Safety and Protection of Minors on Campus Policy. In the interest of the safety and protection of minors on campus, this policy requires Life Sciences to follow minimum requirements for individuals engaged in programs and activities involving minors. This includes screening, monitoring, supervision and training.

The Center for Environmental Studies has a partnership with the River Management Society. This society offers a certificate program to students and is focused specifically on river systems. Life Sciences works with the students to design course work. The certification combines learning about river science, geographic information systems, policy, and river field experience, with emphasis in one of the following areas: river science, river-based policy, or river-based education, recreation and tourism.

Fiscal and Administrative Processes

Life Science's fiscal and administrative processes are managed centrally within the Vice Provost's office. The office has three employees managing the fiscal and administrative responsibilities. These responsibilities include, but are not limited to, Banner certifications, purchase card transactions, record retention, and ARMICS (a state reporting requirement defined as Agency Risk Management and Internal Control Standards).

Information Technology (IT) Applications

Life Sciences has six applications that are specific to the unit. These applications are Sequencher, ArcGIS Pro and ArcGIS Desktop, MEGA, DNAMaster, 2BTech Ozone Data Display and Geneious. These applications either fall under category II (proprietary and de-identified research information, and other data typically subject to the Virginia Freedom of Information Act) or category III data (non-proprietary and publicly available), and are managed by the Life Sciences information and instrumentation tech.

VCU Life Sciences

Applications are installed on Life Sciences computers, in labs which are secured by badge access. This access is revised every June by the information and instrumentation tech based on current student registrations. Remote access to selected applications are provided to students and employees. Employees are required to use Virtual Private Network to access the applications, whereas students use the web browser for which dual authentication is required.

Purpose

The objective of the audit was to determine whether VCU Life Sciences' operations were adequate and managed effectively.

Scope and Audit Procedures

The scope of VCU Life Sciences encompassed fiscal year 2020 through the first half of fiscal year 2021 and included select financial and administrative processes, physical access to labs housing Life Sciences IT applications, management of internal and external partnerships, and the allocation of faculty working hours..

Our audit procedures consisted of the following.

- Interviews with the unit's management and staff to gain an operational understanding of processes and practices.
- Performed data analysis and testing of purchase card data obtained from Bank of America (BoA) Works, purchases made with purchase orders, and journal voucher activity.
- Review of:
 - o Policies, procedures and program information
 - ARMICS documentation
 - Select fiscal and administrative processes, including Banner index certifications and record retention processes
 - Access management to labs housing IT applications
 - Memorandums of Understanding pertaining to partnerships
- Analysis of:
 - Personnel cost allocation of faculty
 - Budget and actual revenue and expenditure amounts

Conclusion

In our opinion, based on the results of our audit, VCU Life Sciences' operations were adequate and managed effectively.

Recommendations to strengthen VCU Life Sciences' operations were included in a separate report furnished to management.

Our audit of VCU Life Sciences began on November 03, 2020. The first draft of this report was submitted to management on April 2, 2021.

VCU Life Sciences 2

Prior to releasing this report in final form, the draft report was reviewed by, and management's action plans were provided or approved by, the following officials:

Jeanne Etheridge McNeil Director, Operations and Administration, VCU Life Sciences

Nicholas Fetzer Senior Director, Finance & Administration
Robert M Tombes Vice Provost, VCU Life Sciences & Research

Gail Hackett Provost

Our audit was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing* and included an evaluation of internal controls and such procedures as we considered necessary in the circumstances.

Executive Director

Audit and Compliance Services

VCU Life Sciences 3

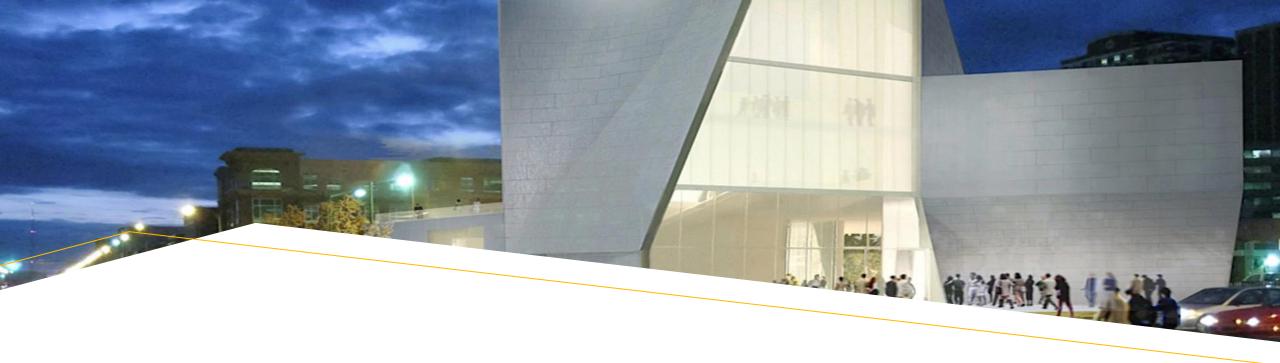
Audit and Management Services Status of Fiscal Year 2020-2021 Audit Work Plan <u>April 30, 2021</u>

Area	Status
Risk-based Audits/Other Reviews	
Prior Work plan: Athletics Auxiliary and Fiscal Processes	Completed
Prior Work plan: IT - Human Subject Research Data Security	Completed
Federal/State Compliance Regulations	Completed
School of Medicine	Completed
Active Directory Management and Server Ransomware Controls	Completed
Office of Research & Innovation: Integrity & Ethics	Completed
VCU Life Science	Completed
Outside Professional Activities	In Progress
ERM Risk Program	In Progress
Social Media	In Progress
Procurement and Payment	In Progress
Remote Learning and Work Security	In Progress
Identity Access Management System	Not Started
Grants and Contracts	Postponed to FY 22

Audit and Management Services Status of Fiscal Year 2020-2021 Audit Work Plan <u>April 30, 2021</u>

Annual Engagements and Activities				
Annual Review of Audit Recommendations Outstanding – FY20	Completed			
President's Discretionary Fund and Travel Activity Review – FY20	Completed			
VCU Police Department – Unannounced Property Inspection – Part 1	Completed			
Audit Risk Assessment – FYs22-24	Completed			
VCU Police Department – Unannounced Property Inspection – Part 2	Completed			

Special Project	Status				
Continuing Projects					
State Employees Fraud, Waste, and Abuse Hotline	In Progress – 0; Closed – 4				
Other Projects					
Police Non-evidentiary Inventory Review	Completed				
School of Medicine \$2,000 Petty Cash Theft – PM&R - Substantiated	Completed				
School of Medicine \$1,325 Petty Cash Theft – Neurology - Substantiated	Completed				
False Unemployment Claim Filings	In Progress				



Board of Visitors Audit, Integrity and Compliance Committee

May 14, 2021



Approval of Minutes

- Audit, Integrity and Compliance Committee Meeting held on March 5, 2021
- Motion to approve the Minutes





Risk Assessment Process

- FY21 effort generates FY22 FY24 tentative work plan
- Work plan reviewed and revised annually to reflect newly identified risks
- Board approves audit plan each May for next fiscal year

Proposed Three Year Audit Work Plan

FY22	FY23	FY24
Grants & Contracts - State and Local	Financial Aid SCHEV Reporting	Faculty Workload Analysis
School of Education Child Development Center	Export Controls	Student Organizations
Banner Controls - AP and General Ledger	ERM RMM Plan Evaluation	Federal Work Study Spending
SOC Reports - Integrated	Foreign Influence	Course Substitution Process
Unused Scholarships	Postdocs	Faculties and Administrative Cost Recoveries
Steam Plant Billing & Allocation	Online Distance Learning Controls	Deferred Maintenance
HS & VCU Operations & Services Agreement	Student-athlete name, image & likeness; NCAA review	HR - Compensation and Classification
External Memorandums of Understanding	Budget Process - part 2	VCU Card Office
Various Fiscal & Administrative Reviews	Various Fiscal & Administrative Reviews	Various Fiscal & Administrative Reviews
Various Petty Cash Audits	Various Petty Cash Audits	Various Petty Cash Audits
IT Audits:	IT Audits:	IT Audits:
Third-Party Management/SOC Reports	Software Asset Inventory	Massey Cancer Center
Physical Access Management (CBORD)	Research Computing/High Performance Computing Security & Data Storage	Centers and Institutes Technical Review
COVID Data Security	Google G-Suite	Business Continuity Planning
Titanium System Review	School of Pharmacy	College of Humanities and Sciences
Maxient System Review	Axium Systems Review	Pyramed/QS1 Systems Review
Data Integrity - Database Security and Controls Review	Millenium Systems Review	Sunapsis Systems Review
	Tableau Usage and Security	Web Services and Applications Security Review
Prior Year Carryover:		



Social Media

Procurement & Payment

IT - Identity Access Management System

FY22 Proposed Audit Work Plan

Engagements	5,550
- 11 Babellielles	3,33

Annual Audits/Projects

(President's discretionary account, police evidence room, follow-ups, risk assessment)

Other Projects

(Management requests, special projects, investigations, workpaper system)

2,500

1,650

Total Hours

<u>9,700</u>



FY22 University Ethics and Compliance Initiatives

- Successful CECO Search and Onboarding
- Risk Assessment Survey
- ACE Hybrid Entity Update
- Education and Communications
- Formalized Guidelines for Compliance Partners
- Program Plan Update



Auditor of Public Accounts VCU FY2021 Financial and Compliance Audit

Mike Reinholtz, Audit Director

- Timing, objectives, scope
- Responsibilities during the audit process
- Other elements of the audit process





Committee Dashboard Measures

- Data Governance Program
- Data Security
- ERM Mitigation Plans
- Planned Audits
- Planned Special Projects
- Ethics and Compliance Program Oversight



Status of FY20 Follow-up Report Corrective Action

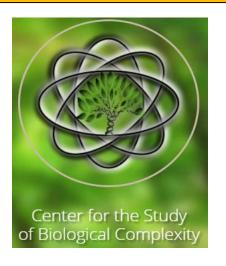
	Target Date		Revised
<u>Finding</u>	as of 9/2020	<u>Complete</u>	<u>Due Date</u>
School of the Arts in Qatar —			
Monthly Banner Recons (Jul 2019)	Dec 2020		
Dentistry Physical Access Mgmt (Dec 2018)	Jan 2021	-	July 2021
CHS Records Management (Dec 2018)	Jan 2021	-	Sept 2021
CHS Banner Recon & Indexes (Dec 2018)	Jan 2021	-	Sept 2021

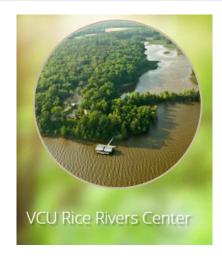


VCU Life Sciences

Audit scope:

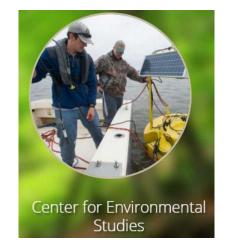
- Select financial and administrative processes
- Access to labs housing Life Sciences IT applications
- Management of internal and external partnerships
- Allocation of faculty working hours





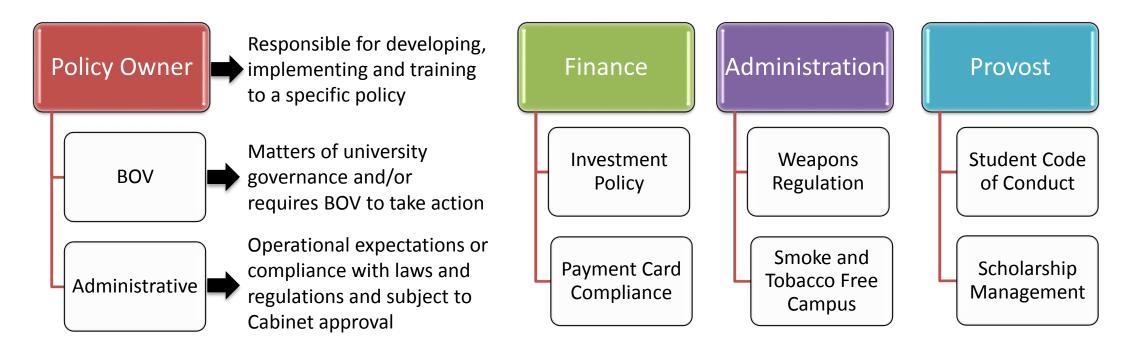
Conclusion:

- VCU Life Sciences' operations were adequate and managed effectively
- No Board level findings





VCU Policy Overview

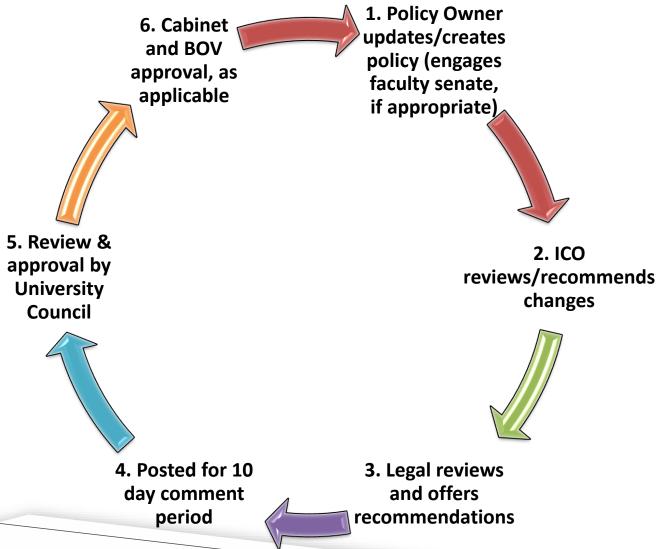


Integrity and Compliance Office (ICO) responsibilities:

- Maintain a public facing website of all policies (policy library)
- Remind policy owners when policies need updating (at least every 3 years)
- Aid with editing, readability, consistency, and conflicts with other policies
- Assist policy owners in navigating the policy update/creation/retirement processes



Policy Approval Process



Interim Policies

- Bypasses steps 4 and 5
- Interim status effective 12 months
- Must complete all steps to become permanent

Minor Revisions

- Does not alter scope or application
- e.g. department title changes
- Requires only steps 1 and 2



VCU Policy Overview

- The BOV Audit Committee receives a policy status report each September, through both the ICO Annual Report and a committee presentation
- VCU's Policy Library contains 166 university-wide policies:
 - 41 BOV
 - 125 Administrative
- Policy owners often operationalize university-wide policies through local policies and procedures, guidance documents, and offices practices



Policy Risk Ranking

	Factor	Scoring
1	Is the policy a source driver for a compliance requirement, which Federal or State law/regulation or	Policy explicitly required – 2 pts
	Accreditation requirement/standard?	No policy requirement but policy
		created to meet expectation – 1 pt
2	Is the policy past due for review and update?	If past due – 1 pt
3	Does the policy advance VCU's strategic plan?	Student Success – 1 pt
		National Prominence – 1 pt
		Urban & Regional Transformation – 1 pt
		Diversity Driving Excellence – 1 pt
4	Is it a BOV-level policy?	Yes – 1 pt
5	Total point value of 1-4	
6	Severity Level Multiplier: University activities addressed in the policy implicates a certain severity level:	
а	Topic concerns risk to personal safety or is critical to maintaining the university's core operations	X 4
	(conferring degrees and conducting research) (e.g., finance and budget; accreditation; etc.	
b	Topic has high impact to university operations (e.g., research activities, student-related; involves fines,	X 3
	criminal and civil penalties; civil monetary penalties, etc.)	
С	Topic has moderate impact on university operations (e.g. conflicts of interest/commitment; law	X 2
	enforcement; development activities; human resources; etc)	
	Total Risk Score - Multiply total point value (5) with severity multiplier (6a-6c). Larger risk score = more	
	risk and priority	



ERM Update

The ERM Steering Committee met in May 0f 2021 to discuss and approve changes to the ERM definitions and process of risk identification and review:

- Enhanced collaboration between Risk and Internal Audit
- Direct engagement between risk owners and Origami ERM system for risk scoring updates
- Improved tracking and monitoring of open risk mitigation/management initiatives
- Improved handoff of risk assessment profiles to Internal Audit



ERM Update

Timeline of Implementation:

- May June: meet with risk owners to review new process
- June Sept: meet with risk owners to review and/or update Risk Mitigation Plans and updates scores in Origami software
- Oct Dec: ERM Steering Committee to discuss and approve risk mitigation plans



Closed Session

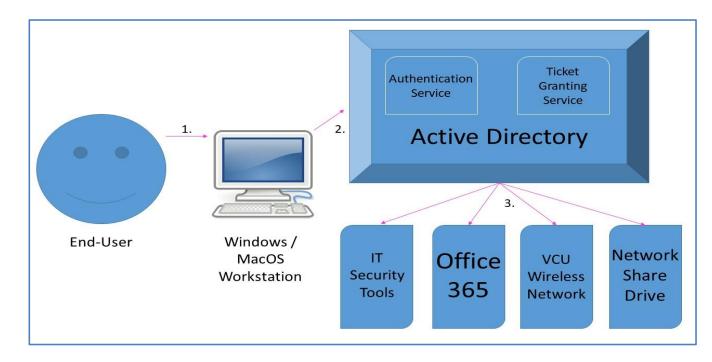


University Active Directory (AD) Security

 Active Directory is a service for networks that manages user identities, system policy settings and system relationships

• It provides the initial layer of user authentication & authorization for network access and

many applications





University Active Directory Security

Audit scope:

- Select security settings and controls for the Active Directory (AD) environment and general controls for the domain controllers
- AD backup and disaster recovery
- AD logging and monitoring

Conclusion:

- Microsoft AD security and controls were adequate and aligned with VCU Information Security
 Baselines and Standards except in the areas of service account management and group policy object management.
- Two Board level findings



University Active Directory Security

Recommendation 1

Develop and implement formal requirements and processes to manage service accounts across the university.

- Create inventory of all service accounts
- Map dependencies for downstream impacts
- Monitor service accounts for anomalous activity
- Include service accounts in the incident response process

The Office concurs & will implement the following:

- As part of previously planned phased IT Rationalization plan, realign Technology Services staff to create an IT Security Program Manager position and to move the Active Directory and Endpoint Management team into the Information Security Office – Completed April 1, 2021
- Continue implementation of current AD Security Enhancement Plan by:
 - Revising standards with more detailed requirements on service account management by September 30, 2021
 - Implementing requirements and processes for Group Managed Service Accounts and SSH service accounts for Linux/Unix systems by January 31, 2022
- Review of feasibility and funding requirements of automated central service account creation tool by May 31, 2022

Service accounts are system accounts that execute applications, access data & network resources and perform specific tasks.

They have broader privileges and greater access to the infrastructure, making them vulnerable to malicious activities



University Active Directory Security

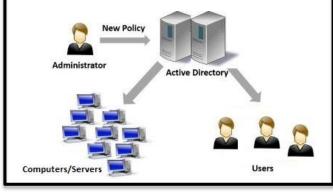
Recommendation 2

Develop formal group policy objects (GPO's) policy requirements, processes, and procedures, and incorporate them into the most applicable IT Standard or Baseline.

The Information Security Office concurs & will implement the following:

- Leverage new Program Manager and re-organized AD and Endpoint Management team to plan and implement a centralized review process for GPOs on a periodic basis – Complete by May 31, 2022
- As part of current AD Security Enhancement Plan:
 - Review and enhance current processes for implementing domain-wide GPOs –Complete by September 1, 2021
 - Review existing AD baseline and update procedures for GPO management by individual units – Complete by January 30, 2022

Group Policy Objects are used to control user and computer configurations in a network. A Server administrator can apply GPO's to control the level of access a user or computer has in a network.





University Counsel Update





Open Session

