

**Kleberg Advanced Microscopy Center (KAMC)
Internal Control Review
Project # 2019-55A
October 8, 2019**

Reviewed by:



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Prepared by:



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This engagement was conducted in accordance with The Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing and with Government Auditing Standards.

Executive Summary
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Objective:

Determine if Kleberg Advanced Microscopy Center (KAMC) Management has taken appropriate actions to ensure instrument usage is tracked, monitored, and billed appropriately.

Conclusion:

The KAMC Director in the College of Sciences has taken action to ensure instrument usage is tracked and monitored. The KAMC Director has opportunities for further enhancement by fully documenting and communicating operating and management procedures and by reviewing KAMC lab access periodically. The Office of the Assistant Vice President for Research Finance and Operations within the Office of the Vice President for Research, Economic Development and Knowledge Enterprise will update iLab customer and billing rate data to ensure billing is appropriate and is actively addressing overdue invoices.

Management Action Plans – KAMC Core Director:

1. KAMC Operating Procedures will be documented and communicated (high)
2. KAMC Lab Access will be reviewed periodically (high)

Management Action Plans – Assistant Vice President, Research Finance and Operations:

3. iLab Data will be updated (medium)
4. Overdue invoices will be addressed (medium)

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Background

The UT System Chief Inquiry Officer completed an investigation in December 2018 regarding allegations of misconduct by the former Physics and Astronomy Department Chair. During the course of the investigation, probable criminal activity was identified within the Kleberg Advanced Microscopy Center (KAMC). The UTSA Police Department conducted a criminal investigation that resulted in two charges being filed with the District Attorney.

Therefore, UTSA's Office of Auditing and Consulting Services conducted an Internal Control Review of KAMC to provide executive management and the Audit Committee with assurance that management has taken appropriate actions and to determine if updated KAMC operating procedures mitigate the risks and issues identified in the investigation to ensure instrument usage is tracked, monitored, and billed appropriately.

The primary mission of KAMC is to enable materials research, design and studies across multiple disciplines through microscopy, analysis and imaging support to researchers and students within the University of Texas of San Antonio and local, regional, and national industrial community. KAMC is a Research Core Recharge Center under the Department of Physics and Astronomy within the College of Sciences. KAMC has eleven advanced microscopes and characterization equipment with assisted and unassisted rates for the use of each instrument for both for internal and external users. KAMC also has rates for sample preparation and imaging services for both internal and external customers.



In June 2018, Dr. Kelly Nash, Associate Professor in the College of Sciences Physics and Astronomy Department was named Interim Director of KAMC. At that time, she evaluated KAMC operations and made the following recommendations:

- 1) Implement procedures to ensure instrument usage is accurately recorded and subsequently billed.
- 2) Recalculate instrument usage fees as cost recovery.
- 3) Formalize industry agreements to ensure fees and deliverables are clear.
- 4) Formalize training for KAMC users.
- 5) Ensure KAMC staff have working knowledge of all KAMC instruments.
- 6) Create an official webpage with useful user information, including billing rates.
- 7) Centralize equipment and renovate spaces to support optimal operating conditions.
- 8) Create a complementing computational facility for KAMC users.
- 9) Update card access to KAMC labs and add additional security cameras.
- 10) Update computer operating systems and install Interlock technology.

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Dr. Nash has begun implementing recommendations #1 - #6 and was named KAMC Director in March 2019. Renovations to KAMC labs are occurring in the Summer of 2019 with an expected completion date of August 31, 2019. The renovations should address recommendations #7 - #10. Based on the nature of the fraud that occurred, the scope of the Internal Control Review was primarily to review the new procedures in place for Dr. Nash's recommendation #1 on procedures to ensure all instrument usage is verified and billed to the correct accounts.

Internal Control Review Details

Operating Procedures

The KAMC Director assessed KAMC operations in June 2018 and has continually made improvements to ensure instrument usage is tracked, monitored, and billed appropriately. Improvements include:

- Moving KAMC instruments into lab spaces that are monitored and have limited access,
- Ensuring instrument usage is based on reservations and modification to reservations are documented,
- Training for KAMC staff on proper use of instruments,
- Logging/tracking of samples received from external customers for analysis, and
- Working with the Office of Research Finance and Operations to bill customers more frequently and to track outstanding billings.

The updated operating procedures could be enhanced by being fully documented and utilized as a training tool for new and existing KAMC staff, Physics Department Staff who assist with KAMC, and the Office of Research Finance and Operations staff. Documented procedures should include the KAMC Director's new operating procedures as well as:

- Invoice collection procedures, and
- Review of instrument reservation time to average use of the instrument for reasonableness.

[The KAMC website](#) does not list KAMC Instrument usage fees. Another UTSA website, [the RCMI Nanotechnology and Human Core](#), lists outdated KAMC instrument usage fees. Current, approved rates in accordance [UTSA Financial Management Operational Guidelines – Establishment and Financial Management of Recharge Centers and Specialized Service Facilities](#) with should be included in documented procedures.

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Observation #1:	Operating Procedures for the daily management and operations of the KAMC labs are not fully documented.
Risk Level:	Undocumented procedures results in a high risk that inconsistencies and undesirable practices could occur.
Management's Action Plan:	<p>Management agrees with this observation and will document daily management and operating procedures. Additionally, the KAMC Director has implemented a new collaborative platform that addresses the issues of data, records and communication using Microsoft TEAMS. Under this platform all new and historical forms, contracts, billing and maintenance records are being maintained. This platform is open to the KAMC staff and the Assistant Vice President, Research Finance and Operations. The platform will also be available to Desiree Porter, Research Infrastructure Support Director, who started at UTSA on August 19, 2019.</p> <p>Revised KAMC rates will be posted to the revisited KAMC website once the new fee structure has been approved. Proposed rates have been routed for approval to the VPREDKE and VPBA for implementation on October 1, 2019. Thereafter, KAMC Director will review rates on an annual basis using similar core facilities at other academic institution for market comparison.</p> <p>Procedures for collection of receivables will be documented and will include:</p> <ul style="list-style-type: none"> ➤ External users will be given three notices: 1) First billing date after use, 2) 30 days past due, & 3) 60 days past due, ➤ Internal users will have their F&A accounts charged after 60 days if the account provided is inaccurate, ➤ User will not be allowed to use KAMC instruments once the user is 60 days past due, ➤ Funding end dates will be collected at the time of account creation in order to eliminate write-offs for invoicing that is associated with expired grants/contracts, ➤ Payment address on invoices will be the same address as on the user agreement, and ➤ The contact for billing purposes will be added to customer forms.
Responsible Person:	Dr. Kelly Nash, KAMC Director
Implementation Date:	February 28, 2020

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Physical Access | Prior to renovations in the Summer of 2019, KAMC Instruments were located in labs in three buildings with multiple rooms and doors. Campus Security Services manages door access and KAMC employee and Physics Department access is granted at the request of the KAMC Director.

The KAMC Director has attempted to limit the number of people with access to the KAMC labs. The KAMC Director requested lab access be limited to the operating hours when KAMC staff were in the lab in an effort to ensure all KAMC instrument usage is monitored.

Review of access reports for February – May 2019 showed that terminated employees, multiple members of the UTSA Police Department and Facilities and housekeeping staff have access to KAMC labs. The UTSA President and Senior Vice President for Business Affairs also have access to the KAMC labs.

Observation #2:	Terminated employees and employees whose daily job duties do not align with needing access to KAMC Labs have access.
Risk Level:	A high risk exists that untrained persons could inadvertently cause damage to themselves or to KAMC equipment.
Management's Action Plan:	<p>The KAMC Director will review card access biannually on November 30th and May 31st.</p> <p>The KAMC Director will consult with Dr. Amanda Haley, Director of Laboratory Safety and Compliance, to review conditions for access. Facilities access will be limited by utilizing signage that would indicate no access without a supervisor present or unless there is an emergency. KAMC rooms will be elevated to status of high hazard facility such that training is provided to UTSA Police Department on an annual basis informing them of increased risks in these areas and that outside of an emergency response entry should be coordinated through KAMC personnel. Additionally, reviewing card access levels during the annual lab evaluations for staff working within KAMC. Training will be provided to personal required to access the lab spaces.</p> <p>The KAMC Director will continue to work with Campus Security Services to ensure lab access is only during the operating hours of 8:00 AM to 8:00 PM once the renovations are complete.</p>

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	As part of the renovations, additional cameras have been installed in the KAMC labs and footage will be retained for 60 days.
Responsible Person:	Dr. Kelly Nash, KAMC Director
Implementation Date:	November 30, 2019

iLab Data

iLab is the calendar tool utilized by Research Core Recharge Centers including KAMC to track customer reservations and usage and to create invoices. The billing rates for each instrument and customer information and financial accounts to bill are retained in iLab.

iLab customer information is populated from information collected from internal customers in the UTSA Project Agreement Form and from external customers in UTSA Unilateral Agreement.

- Internal customers complete the *UTSA Project Agreement Form*, which was last updated in 2014. The form does not include the financial person that should receive and process the interdepartmental transfer timely nor does the form include the names of students allowed to charge the account for usage and the period each student is allowed to charge the account.
- External customers complete the *UTSA Unilateral Agreement*, which was last updated in 2014. The agreement does include the financial person who should receive and process payment on invoices but does not clarify the number of users and the periods that each user is allowed to charge per the agreement.

Seventeen invoices were sampled for twelve internal and three external customers during February – May 2019. The rate for each instrument utilized is included in each customer’s invoice. Issues noted include:

- Three invoices did not agree to the current billing rates because incorrect rate information was in iLab.
- Three invoices had incorrect billing rates because iLab did not have an instrument rate for the customer type.
- One invoice was outstanding because iLab had incorrect customer information.
- One invoice was created four months after usage because iLab did not have correct customer information.

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Additionally, one instance of instrument usage was not billed for unknown reasons.

The root cause of the issues noted in testing were:

- Expired customer information in iLab that is not realized until interdepartmental transfers are not processed or invoices are not paid and
- Outdated or missing billing rates in iLab.

Observation #3:	iLab contains incorrect billing rates and customer information. iLab Customer Forms do not request all information necessary for billing.
Risk Level:	The potential of not collecting payment for services and the time spent researching billing information instead of managing other aspects of KAMC is a medium risk.
Management's Action Plan:	<p>The Office of Research Finance and Operations has hired a Director for Research Infrastructure Support to work with UTSA's Research Core Facilities. The Project Coordinator who functions as the iLab administrator and processes core facility billings and payments reports to the Director. Together they have responsibility for overseeing the administration of the iLab system used to reserve core equipment and facilitate the invoicing and payment.</p> <p>The Director for Research Infrastructure Support will monitor programming of the rates in iLab. The new rate structure will ensure all instruments have an internal and external user rate. The Director for Research Infrastructure Support will communicate with iLab vendor Agilent to determine if KAMC Director can receive automatic notifications when rate changes are processed in iLab.</p> <p>The Director for Research Infrastructure Support will perform a semi-annual review of customers and funding sources to ensure customer information is up to date and funding sources are not expired.</p> <p>The Director for Research Infrastructure Support will review the payment journals to determine if federal or state sources paid invoices noted in testing as having incorrect rates.</p>
Responsible Person:	Beth Manning, Assistant Vice President, Research Finance and Operations Desiree Porter, Director for Research Infrastructure Support

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Implementation Date:	October 31, 2019
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Overdue Invoices | KAMC customer information should include all information necessary to bill and collect payment timely.

As of May 15, 2019, seventeen invoices are in excess of 90 days outstanding, five of which are in excess of 180 days outstanding.

Observation #4:	Invoices for KAMC instrument usage are overdue.
Risk Level:	Not collecting payment for all KAMC usage is a medium risk.
Management's Action Plan:	The Director for Research Infrastructure Support and the Project Coordinator are actively collecting funds owed. Additionally, the Project Coordinator has sent reminders about current outstanding invoices to KAMC customers. A shared network folder has been created to provide up-to-date information on accounts receivables and notification of user's account status so that KAMC Director can cut-off user access associated with outstanding accounts after 60 days for non-payment. in
Responsible Person:	Beth Manning, Assistant Vice President, Research Finance and Operations
Implementation Date:	October 31, 2019