

Technology Commercialization

Audit Report # 20-110

July 6, 2020



The University of Texas at El Paso
Office of Auditing and Consulting

"Committed to Service, Independence and Quality"



The University of Texas at El Paso
Office of Auditing and Consulting Services

500 West University Ave.
El Paso, Texas 79968
915-747-5191
WWW.UTEP.EDU

July 6, 2020

Dr. Heather Wilson
President, The University of Texas at El Paso
Administration Building, Suite 500
El Paso, Texas 79968

Dear Dr. Wilson:

The Office of Auditing and Consulting Services has completed a limited-scope audit of Technology Commercialization. During the audit, we identified opportunities for improvement and offered the corresponding recommendations in the audit report. We intend the recommendations will assist the department in strengthening controls and help ensure that the University's mission, goals and objectives are achieved.

We appreciate the cooperation and assistance provided by the Office of Technology Commercialization staff during our audit.

Sincerely,

A handwritten signature in blue ink that reads "Lori N. Wertz". The signature is written in a cursive, flowing style.

Lori Wertz
Chief Audit Executive

Report Distribution:

University of Texas at El Paso:

Ms. Andrea Cortinas, Vice President and Chief of Staff

Dr. Roberto Osegueda, Vice President for Research

Dr. Chao Zhang, Director, Office of Technology Commercialization

Ms. Athena Fester, Director of Regulatory Assurances, Office of Research and Sponsored Projects

Ms. Mary Solis, Director and Chief Compliance and Ethics Officer

University of Texas System (UT System):

System Audit Office

External:

Governor's Office of Budget, Planning and Policy

Legislative Budget Board

Internal Audit Coordinator, State Auditor's Office

Audit Committee Members:

Mr. Joe Saucedo

Mr. Fernando Ortega

Mr. Daniel Garcia

Mr. Mark McGurk

Dr. Giorgio Gotti

Dr. John Wiebe

Auditors Assigned to the Audit:

Sharon Delgado, Senior Auditor I

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EXECUTIVE SUMMARY

The Office of Auditing and Consulting Services has completed a limited scope audit of Technology Commercialization.

During the audit, we noted the following:

- there is no process in place to ensure all researchers complete the annual financial disclosure,
- seven of ten researchers do not disclose the research related to their licensing agreement as part of the annual financial disclosure,
- the same seven researchers did not have a COI management plan in place for those agreements,
- decisions to require a COI management plan are not always reviewed by the COI committee,
- committee reviews and approvals for the COI management plans are not formally documented,
- COI management plans are not always reviewed annually,
- the COI management plan template and Handbook of Operating Procedures policy have not been updated since 2012 and refer to outdated Regents' Rules,
- there is no Institutional COI policy, nor is there an Institutional COI committee,
- revenues and expenses related to intellectual property are not tracked timely and are not always accurate, and
- a user without a business justification had access to the Sophia Knowledge Management System. The access was removed prior to the end of the audit.

BACKGROUND

The Office of Technology Transfer (OTC) is responsible for management of the University's intellectual property and helps to facilitate the technology transfer process. This is accomplished by:

- evaluating patentable inventions,
- developing patent prosecutions strategies,
- researching licensing possibilities, and
- drafting, negotiating, and managing licensing agreements.

When intellectual property is successfully licensed, royalties collected through licensing can provide funding for the inventor's department and college, as well as for the inventors themselves. Although patentable inventions constitute the majority of licensing activities, the office also handles copyrights (software), confidentiality agreements, and material transfer agreements. The OTC utilizes the Sophia Knowledge Management System (Sophia) to manage invention disclosures, the patent application process and contract compliance.

A required component of the licensing process is the disclosure, review and management of potential Conflicts of Interest (COI). COI are significant outside interests or activities of an employee or their immediate family member that could appear to a reasonable person to significantly affect the employee's performance of their duties. COI is generally an issue of financial or personal gain.

The applicable policies for The University of Texas (UT) System and The University of Texas at El Paso (UTEP) regarding intellectual property and the disclosure and management of COI are summarized in [APPENDIX A: SUMMARY OF REGENTS' RULES AND REGULATIONS, AND UT SYSTEM \(UTS\) AND UTEP POLICIES](#).

AUDIT OBJECTIVES

The objectives of the audit were to determine whether:

- COI are properly disclosed, reviewed, and managed in accordance with the Regents' Rule 30104: *Conflicts of Interest, Conflicts of Commitment and Outside Activities*,
- the commercialization process is in compliance with Regents' Rule 90101: *Intellectual Property*,
- licensing revenues are accurately billed, recorded and distributed, and
- access to the Sophia application is properly administered.

SCOPE AND METHODOLOGY

We conducted the audit in accordance with the *International Standards for the Professional Practice of Internal Auditing* and the authoritative guidelines of the *International Professional Practice Framework* issued by the Institute of Internal Auditors.

The scope of the audit will include all active applications, patents, and licenses from September 1, 2015 through December 31, 2019.

To achieve our objectives, we performed a risk analysis, reviewed applicable Regents *Rules and Regulations*, UT System and UTEP policies, interviewed personnel, and performed detailed testing on a sample basis.

RANKING CRITERIA

We ranked the findings in this report based on an assessment of applicable qualitative, operational control and quantitative risk factors, as well as the probability of a negative outcome occurring if the risk is not adequately mitigated. The criteria for the rankings are as follows:

Priority	An issue identified by an internal audit that, if not addressed timely, could directly impact achievement of a strategic or important operational objective of a UT institution or the UT System as a whole.
High	A finding identified by internal audit considered to have a medium to high probability of adverse effects to the UT institution either as a whole or to a significant college/school/unit level.
Medium	A finding identified by internal audit considered to have a low to medium probability of adverse effects to the UT institution either as a whole or to a college/school/unit level.
Low	A finding identified by internal audit considered to have minimal probability of adverse effects to the UT institution either as a whole or to a college/school/unit level.

AUDIT RESULTS

A. Conflicts of Interest (COI)

A.1 Many UTEP licenses are not disclosed and lack COI management plan(s).	Medium Risk
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UTS 175 requires all U. T. System institutions to adopt a policy for the disclosure, management, and reporting of individual financial COI in research and provides a model policy as an example. The UTEP Handbook of Operating Procedures (HOP) Section 4: Chapter 2 incorporates the model policy and states,

“...a covered individual shall complete or update a financial interest disclosure statement that:

- 1. identifies all research in which the covered individual is engaged at the time of the disclosure.*

The Office of Research and Sponsored Projects (ORSP) Director of Regulatory Assurances annually identifies and communicates with all covered individuals to remind them of their responsibility to file a financial interest disclosure statement. The director actively monitors compliance, and follows up with researchers who have not submitted COI disclosures. ORSP identified 555 covered individuals in 2019.

- 500 of 555 researchers (90%) completed their disclosures for 2019.
- Seven of ten researchers (70%) with licensing agreements completed their disclosure, but did not report their financial interest in the UTEP license agreement.

College /Business Unit	# of Licenses tested	UTS 175 Disclosures Submitted	Disclosure includes UTEP License	Management Plan for UTEP License
College of Engineering	6	6	2	2
College of Science	4	4	1	1
Total				
Total	10	10 (100%)	3 of 10 (30%)	3 of ten (30%)

Although Regents' Rule 30104 prohibits unmanaged COI, UTEP has only created and approved five COI management plans since 2011. ORSP does not have processes in place to ensure that COI related to UTEP patents and license agreements is properly managed:

- seven of the ten agreements (70%) did not have a COI management plan in place.
- decisions to require a COI management plan are not always reviewed by the COI committee,
- committee reviews and approvals for the COI management plans are not formally documented,
- COI plans are not always reviewed on an annual basis, and
- the template currently used for the COI management plan and the corresponding HOP policy, are outdated and include references with broken links to UT System Board of Regents' Rules 90103 and 90104 that were removed in 2015¹.

Currently, there are no consequences for failing to disclose research related to license agreements managed by UTEP. When COI are not properly disclosed or managed, employees may act in their own self-interest, which may not match the best interest of the University.

Recommendation:

- *an escalation process should be developed for researchers who fail to complete the Outside Activity Portal,*
- *potential COI should be reviewed and addressed when the licensing agreement is negotiated to ensure they are properly managed and approved on a timely basis,*
- *COI committee reviews should be formally documented,*
- *COI management plans should be reviewed on an annual basis, and*
- *the COI management template and the HOP policy should be updated to reflect changes to the Regents' Rules.*

¹ Regents' Rules 90101 – 90106 were combined into Regents' Rule 90101: Intellectual Property on August 20, 2015

Management Response:

- *Faculty with outstanding COIMPs will be contacted to initiate process.*
- *Inquiries with other UT schools utilizing the Reporting Portal will be contacted for guidance and processes for COIMP determination.*
- *A system (other than e-mail documentation) for formally documenting committee reviews and approvals will be explored and implemented.*
- *A system to set annual reminders for individuals and administration will be explored and implemented to ensure COI plans are reviewed annually.*
- *The outdated template currently used for the COI management plan has been removed from the web page. The COI management plan section will be updated accordingly.*

Responsible Party:

Athena Fester, Director, Regulatory Assurances

Implementation Date:

March 31, 2021

A.2 An Institutional COI Policy and Institutional COI Committee that meet UT System requirements do not exist.	Medium Risk
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UTS 189 *Institutional Conflicts of Interest* requires each UT institution to create an Institutional Conflict of Interest (ICOI) committee policy and an ICOI committee (ICOIC). The ICOIC should be comprised of a minimum of seven members and

- “b)... at least three members must be faculty...*
- c), the minimum ratio of faculty to non-faculty members must remain as consistent as practicable with the 3/7 standard...*
- d) at least one member of the committee should have no institution affiliation.”*

We noted the following:

- an Institutional COI Policy does not exist,
- an Institutional COI Committee does not exist,
- The University is retaining 50% of the royalty income after patent and licensing costs are covered:
 - 25% goes to the department, and
 - 25% goes to the OTC to cover costs.

Per UTS 189 Section, IV and Institutional COI can exist when:

- a) An institution licenses intellectual property to an outside entity and holds substantial royalty or equity interests in the entity which may be affected by ongoing institution research or other institution activities;*
- b) Substantial gifts to the institution appear to be connected to decisions related to the institution's primary missions in ways that may not be appropriate;*
- c) An institution holds substantial investments or equity interest in an outside entity that has a financial or business relationship with the institution;*
- d) A Significant Outside Financial Interest of any Institutional Official affects or appears to affect the decisions of the Institution;*
- e) An institution enters into a transaction that compromises or appears to compromise the institution's research, teaching, service to students, patient care, outreach mission activities, or its institutional reputation.*

Undisclosed and unmitigated COI by institutional leadership may affect the reputation and the goals of the institution.

Recommendation:

An ICOI policy should be created and the membership of the ICOIC should include seven members, including non-faculty and an outside member as required by UTS 189, to ensure diversity of expertise. We also recommend the Provost's Office should have a representative on the committee.

Management Response:

UTS 189 will be assessed to see how it is applicable to Intellectual Property license agreements.

Responsible Party:

*Athena Fester, Director, Regulatory Assurances, and
Dr. Chao Zhang, Director, OTC*

Implementation Date:

March 31, 2021

B. Commercialization Revenue and Expenses

Regents' Rule 90101: *Intellectual Property* Section 11.5 *Reimbursement of Licensing Costs and Allocation of Income states,*

"... the costs of licensing, including, but not limited to, the costs to operate and support a technology transfer office and the costs of obtaining a patent or other protection for the property on behalf of the Board of Regents must first be recaptured from any royalties or other license payments received..."

B.1 The OTC does not have accurate and timely records for commercialization.	Medium Risk
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We selected a sample of twelve licensing agreements that were active during the audit period. The OTC does not have a comprehensive summary of amounts billed and payments received by their office. Without this information, Internal Audit could not determine whether:

- patent expenses were recovered prior to making distributions to the inventors, and
- the revenues from intellectual property (IP) reported in the UT System Dashboard for Technology Transfer were correct for the Fiscal Year (FY)16, FY17, and FY18.

Technology Transfer by Institution and Fiscal Year²

Fiscal Year	New Invention Disclosures	U.S. Patents	Licenses and Options	Startup Companies	Revenue from IP
UTEP	288	58	16	25	\$192,308
2008-09	27	4	1	2	\$52,149
2009-10	18	4	2	1	\$26,655
2010-11	20	3	0	4	\$1,291
2011-12	26	5	1	12	\$19,509
2012-13	34	5	2	2	\$9,910
2013-14	13	5	2	1	\$15,566
2014-15	59	2	0	0	\$18,312
2015-16	49	6	1	0	\$7,342
2016-17	26	5	1	0	\$2,647
2017-18	16	19	6	3	\$38,927
Total	288	58	16	25	\$192,308

Additionally, auditors reviewed OTC records and noted the following items:

- errors in the billing and receipt of licensing fees,
- missing deposits in the account reconciliations,
- royalties(\$5,000) collected by UTEP in February 2019 were not yet distributed to the inventors, and
- patent expense reimbursements and royalty fees are not updated timely in financial records.

The OTC does not have controls in place to ensure:

- licensees are properly billed,
- payments are made in a timely manner,
- deposits are correctly recorded in the financial records,
- patent expenses are recouped prior to the payment of distributions to inventors, and
- distributions are made to inventors in a timely manner.

The OTC is not in compliance with Regents' Rule 90101, and without these controls, the OTC cannot identify errors and/or guard against the risk of misappropriation of assets.

² <https://data.utsystem.edu/data-index/tech-transfer>, UT System Dashboard Research & Technology Transfer for UTEP, data from 2018 was the last year available at the time of the audit.

Recommendation:

The OTC should update records to include all licensing revenues and expenses in a timely manner to ensure compliance with Regents' Rule 90101. The OTC should review information in the system for accuracy in order to prepare the necessary reports and metrics for licensing income, patent expenses and distributions to inventors.

Management Response:

OTC has created an internal Excel database to record all invoices due by licensees, all the revenue from licensees, and net incomes for distributions.

Responsible Party:

Dr. Chao Zhang, Director, OTC

Implementation Date:

June 30, 2020

C. Access Control

The role of system administrator is high risk, as it has complete control over an application and could be abused if not used properly. People should only be given this type of access if they need it in order to perform their job responsibilities.

C.1 User without a business justification had administrator access to Sophia application	High Risk
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A user without a business justification had administrator access to the Sophia application. The OTC confirmed such access was not needed by the user and agreed to remove it. Related access could have been granted when the Sophia application was first implemented several years ago, and then never removed.

During the course of audit fieldwork, the user's access was removed from the Sophia application and confirmed by the Office of Auditing and Consulting Services.

CONCLUSION

Based on the results of audit procedures performed, we recommend the OTC strengthen their internal controls over the reporting of revenue and expenses for intellectual property. Additionally, processes regarding the reporting of COI for researchers should be implemented to ensure COI disclosures are complete and COI is properly managed.

We wish to thank the management and staff of the OTC for their assistance and cooperation provided throughout the audit.

APPENDIX A: SUMMARY OF REGENTS' RULES AND REGULATIONS, AND UT SYSTEM (UTS) AND UTEP POLICIES

Regents' Rules and Regulations	UTS Policy	Corresponding UTEP Policy
<p>Regents' Rule: 90101 <i>Intellectual Property</i> Sets for the following requirements for intellectual property:</p> <ul style="list-style-type: none"> • UT System employees must assign ownership of intellectual property developed within the course and scope of their employment to the Board of Regents. • In the cases where third parties have license rights to the intellectual property • All patents expenses must be recouped before distributions can be made to the creator. <p>Creators with equity interest or serving on the board of directors in the licensing company must have a COI management plan in place.</p>	<p>No Corresponding UTS Policy</p>	<p>UTEP HOP Section 4: Chapter 4 <i>Intellectual Property</i></p> <ul style="list-style-type: none"> • Assigns ownership of intellectual property created by an employee, student or other individual compensated by the University to the Board of Regents. • Requires all licensing costs to be recouped before any income can be allocated to the creator, in the event the intellectual property is licensed to a third party • Allows creator to hold an equity interest in a licensing company or serve on the Board of Directors as long as there is an effective COI management plan in place.
<p>Regents' Rule 30104: <i>Conflict of Interest, Conflict of Commitment, and Outside Activities</i></p>	<p>UTS 189: <i>Institutional Conflicts of Interest</i></p>	<p>No corresponding UTEP policy.</p>

<p>Requires each UT System institution to adopt a policy governing outside activity and includes processes for disclosing and documenting institutional approvals. Permits employees of UT System institutions to engage in outside work or activities when activities:</p> <ul style="list-style-type: none"> • have been properly disclosed and approved. 	<p>Requires all U.T. institutions to create a policy to identify, disclose, and manage or eliminate Institutional Conflicts of Interest (ICOI) and includes the composition requirements for an ICOI Committee</p>	
	<p>UTS 175: <i>Disclosure of Significant Financial Interests and Management and Reporting of Conflicts of Interest in Research</i></p>	<p>UTEP HOP Section 4: Chapter 2 <i>Disclosure of Significant Financial Interest and Management and Reporting of Financial Conflict of Interest in Research</i></p>
	<p>Requires all U. T. System institutions to adopt a policy for the disclosure, management, and reporting of individual financial COI in research and provides a model policy as an example.</p>	<ul style="list-style-type: none"> • Requires active researchers to complete and annual financial interest disclosure. The disclosure should include significant financial interests for the individual and covered family members. When in doubt as to whether to disclose, the individual should resolve the doubt in favor of disclosure. • Allows the President or his or her designee to appoint a COI official review financial interest disclosures to determine whether a COI exists. • Requires a written COI management plan to govern any COI found. • Requires the policy and each update to be posted publicly and available through the internet. <p>Allows for the discipline or termination of an employee who does not comply with the policy.</p>