

UT Southwestern Medical Center

Office for Technology Development Audit

Internal Audit Report 17:01

May 31, 2017

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Executive Summary

Background

The Office for Technology Development (OTD) supports University of Texas Southwestern Medical Center (UT Southwestern) faculty and inventors by creating collaborative relationships with the public and private sector to develop, protect, transfer, and commercialize research results for the public benefit. OTD's team of cooperative research, licensing, patenting, technology transfer, and venture development experts provide an essential service to the UT Southwestern research community by promoting effective and strategic partnerships in the public and private sector through agreements related to UT Southwestern's valuable intellectual property (IP). IP encompasses intangible property rights resulting from intellectual efforts, including patents, copyrights, trademarks, and trade secrets.

OTD is organized into six distinct functions: Technology Commercialization; Cooperative and Sponsored Research (CSR); Biomedical Product Development; Faculty and Medical Liaisons; Venture Development; and Financial Management. OTD objectives include:

- Initiating and sustaining cooperation between UT Southwestern and the Biomedical industry.
- Providing faculty with strategic and legal guidance to manage IP developed on campus.
- Generating revenue for UT Southwestern and inventors to support the research enterprise.
- Facilitating Biomedical industry growth within the region.

The Board of Regents of the University of Texas System, through UT Southwestern, owns the rights to inventions created by employees if the invention was created using UT Southwestern facilities or time. OTD assists inventors in reviewing IP disclosures and filing patent applications for inventions with the United States Patent Office. The group also identifies parties interested in an invention in order to commercialize or license the technology. During fiscal year 2016, UT Southwestern royalty revenues were approximately \$8.2 million. Royalty revenues received by OTD are first used to reimburse UT Southwestern incurred technology commercialization expenses, including patent and legal costs. The remaining amounts are distributed using a sharing formula to the inventors, labs, and UT Southwestern Office of the President.

Two software applications are used by OTD for day-to-day operations, the Patent and Trademark tracking System (PATTSY) intellectual property management software and the Administrative Information Management system (*iAim*). PATTSY was implemented in 2000 and is a locally-hosted Microsoft Access database application and patent docket system for the processing and management of IP disclosures, patents, trademarks, commercialization evaluation, and licensing. A financial module was later customized and added to PATTSY for OTD users. *iAim* is an internally developed automated workflow system, used by the CSR division to process collaborative and sponsored research agreement proposals.

Executive Summary

Scope and Objectives

The UT Southwestern Office of Internal Audit previously completed an audit of the Office for Technology Development in Fiscal Year 2015. This audit is part of the Fiscal Year 2017 Institutional Internal Audit Plan and focused on key financial activities, including evaluation of the action plans put in place as a result of the 2015 review. This audit focused on the royalties' collection and distribution cycle, including tracking of expenses, collection and distribution of royalties, and management of undistributed amounts for timely tracking and resolution. (See Appendix A for a flowchart detailing the Royalty Revenue process). The audit scope period included activities from January to December 2016. Overall objectives for the review include determining the adequacy and effectiveness of processes and internal controls in place to ensure:

- Timely and accurate management of royalty receipts and distributions.
- Timely and accurate management of royalty billing amounts due.
- Efficient and effective system tools to track and manage royalty activities.
- Compliance with key institutional policies and procedures.

We conducted our audit according to guidelines set forth by the Institute of Internal Auditors' International Standards for the Professional Practice of Internal Auditing.

Conclusion

Overall, OTD is in compliance with UT Southwestern policies and procedures and has implemented all action plans from the previous audit. Specifically, OTD has implemented procedures to substantially reduce the Royalty Holding account balance from \$7.2M in 2015, to \$333K as of March 31, 2017. An opportunity exists to obtain signed Revenue Sharing Agreement (RSA) in a more timely manner by implementing standard follow-up procedures. Executed RSAs from each member of the inventor team are necessary in order to distribute related royalty income.

Management is evaluating a new system. A successful transition from PATTSY to a new system will enhance monitoring, tracking and reporting of revenues, and streamlining the royalty revenue process as a whole.

Executive Summary

Included in the table below is the observation noted, along with the respective disposition of this observation within the Medical Center internal audit risk definition and classification process. See Appendix A for Risk Rating Classifications and Definitions.

Priority (0)	High (0)	Medium (0)	Low (1)	Total (1)
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The key improvement opportunity risk-ranked as low is:

- **Define Procedures to Ensure Timely Follow-up with Inventors** – Documented procedures were not in place to ensure timely and consistent contact with inventors for their signed Revenue Sharing Agreement (RSAs).

OTD Management has developed an action plan for this opportunity. The response along with additional details for the key improvement opportunity are presented in the Detailed Observations and Action Plans Matrix (Matrix) section of this report.

We would like to thank the Office for Technology Development for the courtesies extended to us and for their cooperation during our audit.

Sincerely,

Valla Wilson, Associate Vice President for Internal Audit, Chief Audit Executive

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Executive Summary

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Detailed Observations and Action Plans Matrix

Observation	Recommendation	Management Response
<p>Risk Rating: Low ●</p> <p>1. Define Procedures to Ensure Timely Follow-up with Inventors</p> <p>Defined procedures are not in place to ensure follow up actions are performed in a consistent and timely manner to locate inventor team members. These leaders can also be utilized in the communication and outreach efforts with research team members as needed.</p> <p>Undistributed revenues totaling \$192K, attributed to RSAs not executed, were more than 90 days old.</p> <p>Without proper procedures to monitor follow-up activity with inventors to obtain an executed RSA, revenues distributions may not be timely.</p>	<ol style="list-style-type: none"> 1. Update existing procedures to define follow up and outreach activities with unlocated team members, and request department leadership assistance in locating contact information for their previous employees. 2. Obtain management approval on updated procedures. 3. Monitor, based on the procedures approved, timeliness of follow up efforts for pending RSAs. 	<p><u>Management Action Plans:</u></p> <ol style="list-style-type: none"> 1. Update follow up procedures to include defined timelines for activities. 2. Obtain leadership approval on updated procedures. 3. Monitor procedures to determine if the follow up process is working as intended. <p><u>Action Plan Owners:</u></p> <p>Director, Technology Commercialization</p> <p>Vice President for Technology Development</p> <p><u>Target Completion Dates:</u></p> <p>August 31, 2017</p>

Appendix A – Risk Classifications and Definitions

As you review each observation within the Detailed Observations and Action Plans Matrix of this report, please note that we have included a color-coded depiction as to the perceived degree of risk represented by each of the observations identified during our review. The following chart is intended to provide information with respect to the applicable definitions and terms utilized as part of our risk ranking process:

Risk Definition - The degree of risk that exists based upon the identified deficiency combined with the subsequent priority of action to be undertaken by management.	Degree of Risk and Priority of Action	
	Priority	An issue identified by internal audit that, if not addressed immediately, has a high probability to 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 that is considered to have a high probability of adverse effects to the UT institution either as a whole or to a significant college/school/unit level. As such, immediate action is required by management in order to address the noted concern and reduce risks to the organization.
	Medium	A finding identified by internal audit that is considered to have a medium probability of adverse effects to the UT institution either as a whole or to a college/ school/unit level. As such, action is needed by management in order to address the noted concern and reduce risk to a more desirable level.
	Low	A finding identified by internal audit that is considered to have minimal probability of adverse effects to the UT institution either as a whole or to a college/ school/unit level. As such, action should be taken by management to address the noted concern and reduce risks to the organization.

It is important to note that considerable professional judgment is required in determining the overall ratings presented on the subsequent pages of this report. Accordingly, others could evaluate the results differently and draw different conclusions. It is also important to note that this report provides management with information about the condition of risks and internal controls at one point in time. Future changes in environmental factors and actions by personnel may significantly and adversely impact these risks and controls in ways that this report did not and cannot anticipate.

Appendix B – OTD Royalties Process Map

The following process map illustrates the current life cycle of royalty revenues following the execution of a license agreement. The implementation of a new system will assist in streamlining this process.

