

## 22-119 Willed Body Program

### EXECUTIVE SUMMARY

We have completed our audit of the University of Texas Health Science Center at Houston (UTHealth) Willed Body Program (WBP) and Human Structure Facility (HSF). This audit is required by Texas Administrative Code (TAC), Chapter 485, Rule §485.1. The audit was conducted in accordance with the *International Standards for the Professional Practice of Internal Auditing*.

#### Background

According to TAC, Chapter 485, Rule §485.1, “Each member institution shall conduct an audit of its procedures and methods for receiving, storing, using, and transporting bodies or anatomical specimens and disposing of remains. This audit must be conducted at an interval of 5 years, coincidental with regularly scheduled Board inspections. The audit shall be performed by the institution’s audit department or a professional audit firm according to an audit template prescribed by the Board. The results of the audit shall be filed with the secretary-treasurer within 30 days of its completion. A follow-up report shall be filed with the secretary-treasurer no more than 1 year later”.

The donation of cadavers to support medical education and scientific research is critical to advancing medical science. The WBP serves the administrative functions associated with providing cadavers and anatomical material essential for the teaching of medical and dental anatomy students, research, and continuing education activities approved by the Anatomical Board of the State of Texas (SAB). Employees of the HSF are responsible for cadaver intake, identification, embalming, preparation, storage (including anatomical specimens), and cremation.

#### Objectives

Our objective was to determine whether UTHealth’s WBP has adequate controls in place to ensure the receiving, storing, using, and transporting of cadavers or anatomical specimens and the disposing of remains comply with state law.

#### Scope

The scope period was September 1, 2020 to November 30, 2021.

#### Conclusion

Overall, controls around the UTHealth WBP are adequate and functioning as intended. We noted the following opportunities for improvement:

#	Audit Observation Summary	Risk	Risk Rating
1	Cadaver and/or anatomical specimen information was not consistently updated.	Information may not be current or accurate.	<b>Medium</b>

## OBSERVATIONS & MANAGEMENT RESPONSES

### #1 - Cadaver and Anatomical Specimen Documentation

#### Cause

Staff responsible for maintaining cadaver and/or anatomical specimen information are not consistently updating the respective logs or database in accordance with formal procedures.

#### Risk

Without updating the primary log or database, cadaver and/or anatomical specimen information may not be current or accurate.

#### Condition

The UTHealth Willed Body Program is comprised of two different components; the Willed Body Program (WBP) and the Human Structure Facility (HSF). Each component utilizes a separate database to track donor information. A&AS obtained a copy of each database to perform a comparison of donors received at UTHealth during the scope period as reported by each component and noted the following:

- Seventeen cadavers were documented in the HSF Database but not in the WBP Database. Upon further review, we noted these donors were received during a period when the WBP Senior Coordinator position was vacant. Once notified, the current WBP Senior Coordinator entered the appropriate donor information into the WBP Database.

A&AS selected two separate samples of specimens (10 from sheet and 10 from shelf) to perform inventory counts of the HSF facility and noted the following:

- 2 of the 10 specimens were not located on the shelf as described on the Specimen Log spreadsheet. Upon further review, it was noted one specimen had been cremated and the other specimen had been transferred to another facility; however, the Specimen Log was not updated accordingly.
- 1 of the 10 specimens was located in the HSF inventory; however, the location of the specimen was not documented correctly on the Specimen Log. Once notified, HSF staff moved the specimen to match the location noted on the spreadsheet.

In addition, an inventory count was performed at the UTHealth Brain Collection Lab, which is maintained by the Psychiatry & Behavioral Sciences department. A&AS selected two separate samples of specimens (7 from sheet and 15 from shelf) to perform inventory counts and noted the following:

- 2 of the 7 specimens were not located on the shelf as described on the spreadsheet. Another two specimens were notated with different Institute of Forensic Science (IFS) numbers on two spreadsheets.
- 1 of the 15 specimens was not located on the respective inventory spreadsheet. Another specimen was not properly documented. The box which held the specimen and the individual specimen pieces located in the box were notated with different SAB numbers.

#### Criteria

UTHealth HOOP Policy 97 Deceased Human Bodies and Anatomical Specimens requires the Human Structure Facility to maintain a detailed system for monitoring the location of deceased human bodies and anatomical specimens consistent with applicable law and SAB rules and regulations. Additionally, other departments and schools are to maintain a tracking system and file logs with the Human Structure Facility.

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**Recommendation(s)**

The WBP, HSF and Brain Collection Lab should develop and implement a process, including an oversight function, to ensure cadaver and/or anatomical specimen information is complete, accurate, and updated in a timely manner.

**Rating**

Medium

**Management Response**

1. Willed Body Program: A new process will be implemented in order to generate internal quarterly reports (frequency can be adjusted if necessary) for review by the DMO. The internal report of registered program cadaver donors and anatomical specimens from the Willed Body Program database should match with the Human Structure Facility internal report. If there are any discrepancies, the DMO should report these to our Human Structure Facility management to make the required corrections.
2. Human Structure Facility: A new process will be implemented to ensure that our anatomical specimen log is updated daily to reflect movement from one location to another location within the anatomy lab or transferred out of the anatomy lab. In addition, the annual cadaver inventory required by the SAB on July 31<sup>st</sup> of each year will be supplemented by an annual inventory of anatomical specimens.
3. Brain Bank: The two specimens that were not located on the shelf were being worked on at the moment of inspections. We have replaced the specimens on the appropriate shelf. The other incidents were related to mislabeling of three specimens by one digit, where a 9 was mislabeled with an 8 in all cases. This has now been corrected. To avoid any possibility of specimen misidentification, the Brain Collection always uses both the IFS and SAB numbers when identifying a sample. The audit team recommended the use of one file housing both the IFS and SAB specimen information, to replace the two separate files we currently use. We have now implemented the use of this single file. We will conduct an annual inventory and document an inventory procedure similar to that used in the Human Structure Facility.

**Responsible Party**

WBP / HSF - Len Cleary, Ph.D., Faculty Director, Human Structure Facility, Neurobiology & Anatomy

Brain Bank - Consuelo Walss-Bass, M.D., Faculty Director, Brain Bank, Psychiatry & Behavioral Sciences

**Implementation Date**

July 31, 2022

We would like to thank the Willed Body Program, Human Structure Facility, and Brain Collection Lab staff and management who assisted us during our review.



Daniel G. Sherman, MBA, CPA, CIA  
Associate Vice President & Chief Audit Officer

**OBSERVATION RATINGS**

<b>Priority</b>	An issue that, if not addressed timely, has a high probability to directly impact achievement of a strategic or important operational objective of UTHealth or the UT System as a whole.
<b>High</b>	An issue considered to have a medium to high probability of adverse effects to a significant office or business process or to UTHealth as a whole.
<b>Medium</b>	An issue considered to have a low to medium probability of adverse effects to an office or business process or to UTHealth as a whole.
<b>Low</b>	An issue considered to have minimal probability of adverse effects to an office or business process or to UTHealth as a whole.

**NUMBER OF PRIORITY FINDINGS REPORTED TO UT SYSTEM**

None.

**MAPPING TO AUDITING & ADVISORY SERVICES FY 2022 RISK ASSESSMENT**

Reference	Risk
None	Required by TAC, Chapter 485, Rule §485.1.

**DATA ANALYTICS UTILIZED**

Compared the WBP and HSF databases to identify SAB numbers not recorded in both databases.

**AUDITING & ADVISORY SERVICES ENGAGEMENT TEAM**

AVP/CAO - Daniel G. Sherman, MBA, CPA, CIA  
Audit Manager - Nat Gruesen, MBA, CIA, CISA, CFE  
Auditor Assigned - Casandra Wiley

**END OF FIELDWORK DATE**

February 17, 2022

**ISSUE DATE**

March 30, 2022

**REPORT DISTRIBUTION**

Audit Committee  
Secretary-Treasurer of the State Anatomical Board  
Kevin Dillon  
Ana Touchstone  
Dr. Len Cleary  
Stephanie Shock  
Dr. Consuelo Walss-Bass