

A Task Trainer for Ultrasound-Guided Lumbar Puncture in Obese Patients

IMSH, January 2021
Joseph R. Sikora, M.D.; Jeff Heimiller, M.D.; Charles Lee, M.D.; Ryan Walsh, M.D.; Kenneth Palm, M.D.
Vanderbilt University Medical Center



1

The Problem

- Lumbar puncture (LP) is a common ED procedure
- Obesity Increases difficulty
- Ultrasound improves success
- Now an essential skill for trainees



2

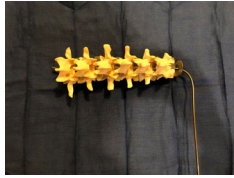
Our Solution

- Develop a low-cost model for US LP on obese patients



3

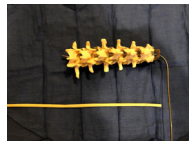
Construction



VANDERBILT HEALTH

4

Construction



VANDERBILT HEALTH

5

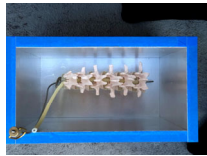
Construction



VANDERBILT HEALTH

6

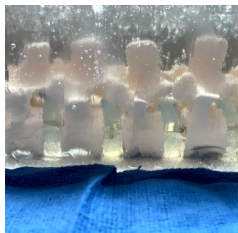
Construction



VANDERBILT HEALTH

7

Construction



VANDERBILT HEALTH

8

Completed Product



VANDERBILT HEALTH

9

US Demonstration



10

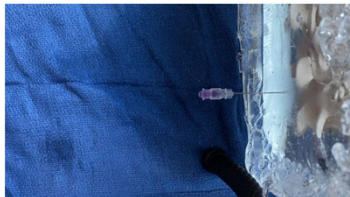
Demonstration



VANDERBILT HEALTH

11

Demonstration



VANDERBILT HEALTH

12