

Spectroscopic Pathology Pictorial Documentation

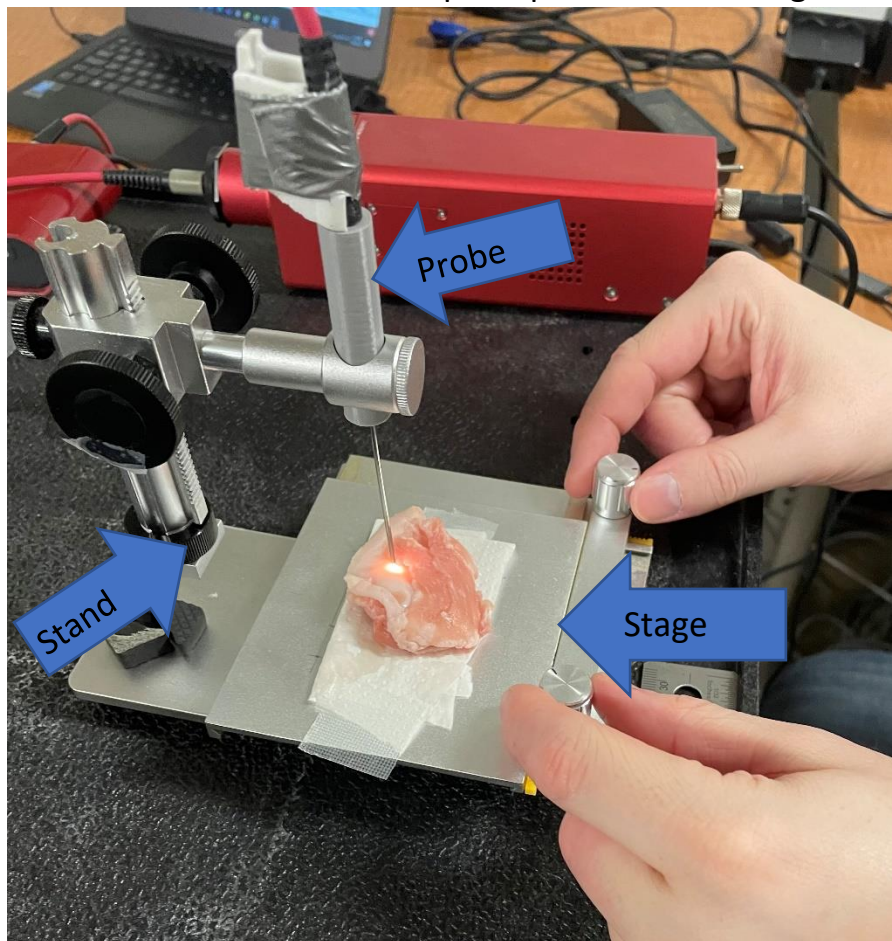
Feb 2023

Purpose

The purpose of this document is to provide insight into the desired procedure to collect skin data using a spectroscopic probe. Images are provided to describe each step.

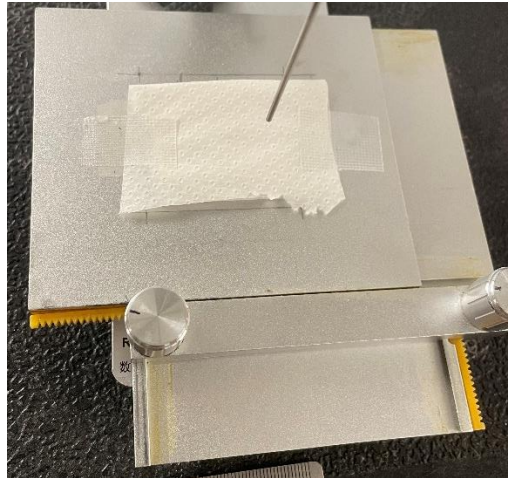
Setup

The physical setup can be seen below. The stage moves in the x and y using manual fine control knobs. The stand moves in the z using manual knobs. The probe is placed in the stand and the sample is placed on the stage.

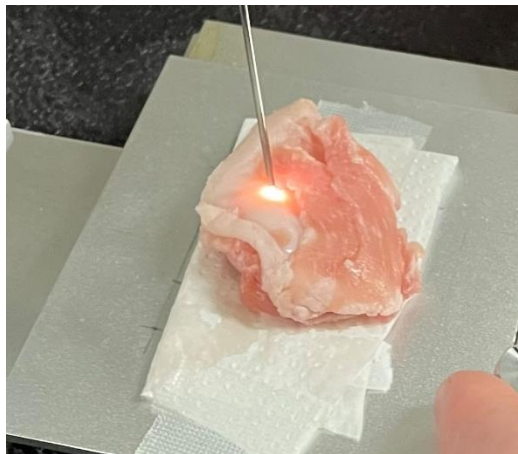


Procedure

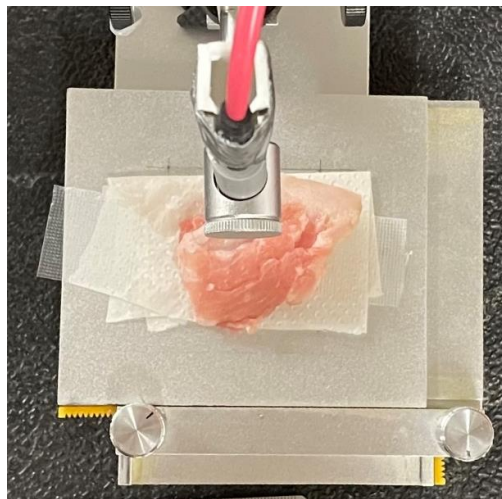
1- Tissue paper is placed in the centre of the stage



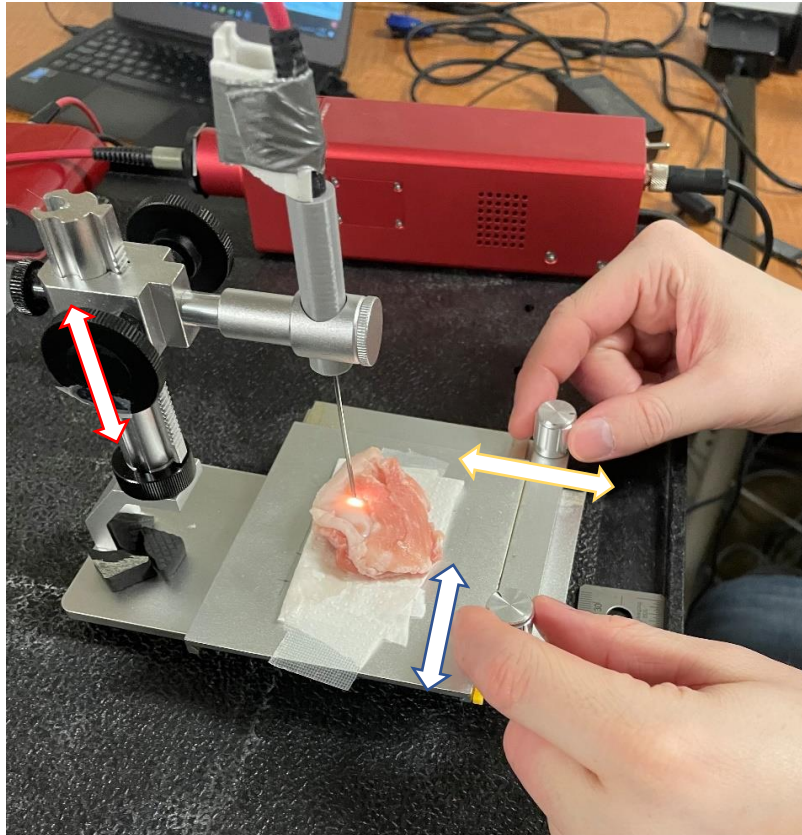
2- The skin specimen is placed atop the tissue paper in the centre of the stage



3- Optical imaging (photography) of the specimen. Please ensure the specimen and any measurement references are fully visible.



- 4- Position the region of interest (ROI) under the probe using the two knobs on the stage. The laser should directly illuminate the ROI.



- 5- Once in position.
- a. Lower the probe until it is within 5mm of the tissue
 - i Closer = smaller collection area = cleaner readings.
 - ii Closer = signal
 - iii The probe should not touch the tissue surface.
 - b. Tell the computer operator the tissue type. (Cancer, healthy)
 - c. The operator will request the probe be lowered or raised to achieve optimal signal strength.
- 6- Once confirmed the operator will record the region of interest for 1 second
- a. Repeat steps 4-6 for all regions of interest.

We will repeat steps 1 – 6 for each tissue sample.