

Harold

Excellent... we used the same (or very similar) system here - that will get you a decent scan.

here's a bunch of technical stuff that won't make sense to you but will to the scanning technologist. Send this to them before hand - it is important to get the settings right.

80 kVp (important to use the lowest possible kVp)

current - highest possible - we used 485mA

lung convolution kernel

small field of view

thinnest slice thickness - 0.625mm

helical mode

for the patient name input "Stewart Jones Sticks"

put in your name as referring physician

that metal plaque and any metal inclusions will produce streak artifacts in the scan (white streaks that emanate out from the metal) - so have them see how bad they are.... you may need to use a beam hardening correction

if they use the dual energy capabilities of the scanner, have them reconstruct a series at 50, and 60 kVp to see how the detail of the wood is on those scans compared to the 80 kVp scan. We didn't do that in this case but I did with an 18th century wooden sculpture for the Art Gallery of Ontario and the improvement was quite stunning

For the scan... get a piece of insulation foam that is just a bit longer than the stick and about a meter wide (buy a single piece and cut it down to size). This is important to get the stick up off the scanning bed and for the blade to be in the horizontal plane as it makes it easier to examine the scans. You see that in the video - although note that there is a sheet over the foam in the video shot - don't do that... just have the stick lying on the foam.

have them place a small bag of saline solution somewhere in the scan (but well away from the stick).

I see there is some discussion about it being elm, and what kind of elm. If you can - get some samples of the candidate woods and include them in the scan (ideally kiln dried) - I don't know if there are density differences - but it's worth checking - that is the wood samples you see in the video... having the foam insulation to make sure everything is on the same plane helps with this analysis. We had black walnut, hickory, ash and cherry - there was a lot of overlap in wood density but that is something I continue to work on.

Take a hard drive or memory stick that has never been used on any computer - one with enough space for about 5 GB of data - a 16 GB memory stick. Have them save the data to that drive - preferably from the AW workstation than straight from the CT console

and take a camera and take lots of photos. The classic "money shot" is from behind the scanner looking through the opening to the stick with the positioning lasers on - you see that in the video.

I hope it goes well!!

Andrew