Hands-On Sessions training rules

Tips, tricks and rules for a successful tutoring of Hands-On Sessions

1. **10 Minutes before (Tutor)**
    a. Get to know the machine briefly:
    Check the function for depth, focus, gain, colour, measure, pointer, probe select
    Check the quality of the pre-sets; adjust them if necessary.
    (Don't bother too much with the technical adviser if present. They want you to admire the machines' possibilities, which takes too much time; you can do this during the break).
    b. Get to know the model/patient briefly:
    Exchange your names and explain the task.
    "This time, it will not be about your disease. It is all about imaging".
    "They are all doctors you can trust. They will not talk about you or your findings elsewhere."
    Rules: "If you feel any distress, please indicate this immediately to me".
    Try to scan briefly the patients' pathology (without commenting medically).
    You should have a brief written summary of the patient´s history relevant for IUS (given to you by the Local Medical Lead / Office).
    c. Set up the timer that is provided in the breakout room to keep the time:
    25 min for Hands-On Sessions with rotation.
    Use this tool to allocate enough time for each participant to scan the patient (3 – 4 min).

2. **Interactive advice**
    a. Welcome the group and introduce the volunteer by name; explain the rules again.
    b. At the beginning of the hands-on session, it is important to spend about ten minutes demonstrating the practical aspects: how to handle the probe, how to visualise the intestine, and how to perform all the necessary scans — starting from the rectum/sigmoid, moving up to the terminal ileum, and then the small bowel. After this demonstration, all participants should take turns handling the probe themselves and rotating through the examination.
    c. After this demo, don't do the scanning yourself! (Everybody knows that you are better, it is just daunting)
    d. Stand on the left side of the participant so that you can see her or his hand and the picture acquired.
    e. Make the group participants familiar with the most important key buttons (preset already set) depth, gain, focus, time gain compensation, freeze, measurements): The first participant – already sitting to get started - should be assisted by the rest of the group – under your guidance e.g. give commands please show the most important key buttons. This should be done quickly (2 minutes) not to delay the patient exam.

f. You should NOT recommend touching the probe's surface to find out if it is active or to check the probe's orientation. There are better ways! (Gel, detaching the probe from the skin by tilting it to the left side in a horizontal position, sliding test. Explain "scissoring".) "Keep the left hand dry for the machine".
g. Put your focus completely on the actions of the participant. Don't leave her or him fumbling around without strict guidance and supervision.
h. Avoid touching the participant's hand or ask for their permission beforehand.
i. Instead guide the hand by comprehensive commands and explain the commands, if not understood: turn, tilt, move towards the patients left side, gradual compression, etc:
"Puppet on a string"-technique.
j. Make the steering technique comprehensible (follow the structure by putting it always back into the centre of the screen)
k. Make the turning technique comprehensible: **Clockwise for horizontal (transversal) to longitudinal (sagittal), Anticlockwise for longitudinal to horizontal**
l. Make the turning technique comprehensible (clockwise for horizontal to longitudinal, anticlockwise for longitudinal to horizontal, position of the hand on the transducer)



m. Give every participant a simple task like: "Show us the sigmoid, please" Change tasks to avoid competition situations.
n. Make positive comments.
For example, "well done, try this a second time much slower" instead of "this was too fast"
o. Include the whole group with open, "low threshold" questions: "Has anyone a suggestion which structure this might be?" instead of "where is the artery?"
p. If passive participants start talking behind your back, invite them to ask their questions loudly.
q. Balance the group so that everyone receives similar attention. Tame the dominant participants and encourage the shy colleagues.
r. Don't make any potentially embarrassing comments about the volunteer's body. For example, avoid the word "fat" und use "soft tissue" instead.
s. FOCUS ON TIMING: **Everybody** should scan actively.
t. Give your thanks to the group and ask if they have learned something new.
u. Give your thanks to the model and ask if everything had been easy/warm/friendly enough.