UW Medicine - Pathology

Telepathology Procedure

Adopted Date:	06/14/13
Revision Date:	

PURPOSE

To instruct in the use of camera systems on Telepathology Carts and fixed-location microscope cameras in transmitting rapid on-side evaluation (ROSE), frozen section, and consultation slide images between UW Medicine sites.

The components based system was designed and approved by UW Pathology for dynamic live video telepathology.

SCOPE

Telepathology is limited to rapid on-site evaluations (ROSE), frozen section images, and slide consultation images, in which camera systems are situated on cytopathology cart(s) and fixed-location microscopes equipped with camera systems capable of broadcasting live streaming video to internet-enabled workstations. Computer workstations allow electronic access to pertinent clinical information at the time of slide image review. The components-based system was designed and approved by UW Pathology for dynamic live video telepathology.

The ROSE, initial frozen section interpretation, and consultation interpretation procedures are the same as for standard (non-telepathology) procedures except that the pathologist initially examines streaming video of slide images rather than direct examination of glass slides. All policies and procedures related to patient identification, separation of cases, labeling, etc. are not altered.

PROCEDURE

Per the Telepathology Policy - All users must be trained on the telepathology equipment before use.

This procedure will reference the *Telepathology Training Manual* provided at the time of training. A hard copy of this manual is kept on each telepathology cart, and is available to the Pathologists and Pathology Computer Support Service Desk on the network (S:).

SENDING FROM TELEPATHOLOGY CART

1. The radiology technician will move the telepathology cart from its storage location to the designated location in the procedure room and notify the cytotechnologist.

2. *Plug in the power and network cable to their designated ports in the procedure room.* The *power (white)* and *network cable (blue)* are coiled up and hanging on the back the telepathology cart. Uncoil the cables to the necessary length and plug them in. The Ethernet port will be labeled *PATH*.

3. Turn on the power strip.

   Once powered on, the telepathology cart will take 2 minutes to completely initialize and be ready for use.

4. *Perform the Visual Startup Checklist* as designated in the *Telepathology Training Manual*.

   a. Ensure that the microscope's beam splitter is in the correct position.

   b. Ensure the *Camera control box is ON*, and that the *SCENE light* is set to *1*. The camera control box is on the base of the cart. The switch should be turned to the ON position and *glowing green*.

   c. Ensure that local monitor is ON. The *Power* light will be *glowing blue*.

5. When you see the microscope image on the cart's monitor, the cart system should be ready for the pathologist to connect

6. *Page the Pathologist:* Use the Cytotechnologist (Spectralink) wireless phone and hands free headset (Phone Number; **206-598-7595**)

7. *Inform the Pathologist to connect to the appropriate telepathology video stream.* Each system and location has its own System ID, labeled on the cart's monitor.

8. *Question the pathologist about the System ID*. Once the pathologist is connected to receive images, ask them to read back the telepathology system ID which is embedded on the upper right corner of the microscopy video. Confirm that it matches the system ID of the sending location.

9. *Convey to the Pathologist the patient identification. Perform standard checkback to ensure correct patient identification and clinical information.*

10. If there are problems with the equipment or the Pathologist is having trouble connecting, refer to the *Troubleshooting Checklist* in the *Telepathology Training Manual* located on the Telepathology Cart.

11. If the issue cannot be addressed from the *Troubleshooting Checklist*, move to the backup telepathology system located on the microscope in the Frozen Section Room in the OR of UWMC. Notify the Pathologist of the move.

12. When finished with the procedure, unplug the *power (white)* and *network (blue)* cables, coil them, and place them on their cable hooks on the back of the cart.

13. The radiology technician will return the telepathology cart to its storage location.

SENDING FROM A FIXED LOCATION MICROSCOPE
1. Turn the microscope lamp on.

2. Check the beam splitter on the microscope's camera head and ensure it is in the *camera and eyepiece viewing position*.

3. Ensure that the camera is turned on. The camera control box will have an on/off switch which should be glowing green.

4. Turn the local monitor on and ensure it is on the correct input.
   This is an important step to ensure the areas you are trying to show the Pathologist are in focus and centered in the camera's field of view.

5. The camera and video system should be on at all times.

6. Once you have determined that the beam splitter is in the in the correct position, and the camera is on, the system is ready for transmission.

7. *Page the Pathologist.*

8. *Inform the Pathologist to connect to the appropriate telepathology video stream.* Each system and location has its own System ID, labeled on the cart's monitor.

9. *Question the pathologist about the System ID.* Once the pathologist is connected to receive images, ask them to read back the telepathology system ID which is embedded on the upper right corner of the microscopy video. Confirm that it matches the system ID of the sending location.

10. *Convey to the Pathologist the patient identification. Perform standard checkback to ensure correct patient identification and clinical information.*

11. If there are problems with the equipment or the Pathologist is having trouble connecting, refer to the *Troubleshooting Checklist* in the *Telepathology Training Manual*.

VIEWING FROM PCS-SUPPORTED COMPUTER

Pathologists are trained by demonstration on use of the software for viewing the microscopic images.

1. Open the *Telepath Links* folder on your desktop.

2. In the opened window you will see a list of shortcuts for the installed telepathology locations. Double-click to open the shortcut for the location you need to view.

3. A VLC Media Player video window will open and begin live playback of the video. It may take up to 30 seconds for the video window to appear. Initially it will show an orange cone. Shortly thereafter, it will begin live playback of the video.

4. Double-click on the video image to make it full-screen.

5. Convey to the sending party the telepathology system ID which is embedded on the upper right corner of the microscopy video. Confirm that it matches the system ID of the sending location.

6. *Perform standard checkback to ensure correct patient identification and clinical information.*

7. In full screen mode, double-click the video again (or press the ESC key) to exit full-screen mode.

8. Close the video player when done.
   This is critically important. Each viewer consumes bandwidth, such that if multiple people were to have the video open to a camera location site it would substantially slow image transmission to the person who should be accessing the image stream.

REFERENCE

Telepathology Training and Competency Assessment Packet, 100-02-01-35

Telepathology Policy, 100-02-01-33

UWMC Pathology Chief of Service: HMC Pathology Chief of Service:
(Signature and Date)   (Signature and Date)

[signature: Suzanne Dintzis] 6/21/2013   *[signature: Stephen C Schmechel MD]*

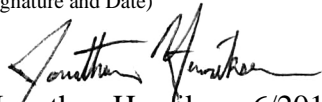   6/21/2013

Suzanne Dintzis, MD, PhD   Stephen Schmechel, MD, PhD

Written by: Revised by:
(Signature and Date)   (Signature and Date)

[signature: Jonathan Henriksen]
_Jonathan Henriksen 6/2013 ____   _____