

## Aperio ScanScope CS2

### Purpose

This procedure provides instructions for digitally scanning microscopic surgical, cytology and hematology slides.

### Materials

Equipment		Reagents	Supplies
Light source Aperio ScanScope CS2 Dell Computer Attached Computer monitor		N/A	Alcohol wipes Kim Wipes
Step	Action	Related Document	
1	Power Up: (Must be done IN THIS ORDER per Aperio): The light source will not connect/start if order is not followed. 1- Light source 2- ScanScope CS2 unit -in back of unit 3- Work Station (CPU) 4- Computer Monitor		
2	Log into the network using regular user ID and password (Children's network CE# and password).		
3	Click on the Aperio scope icon. Log into Aperio using the common user ID and password. Press "Connect"	User ID: administrator Password: scanscope (all lowercase)	
4	Click on "Continue" when it states "Research Use Only" (RUO)		
5	<u>Perform Presnap</u> : Insert blank glass slide into tray. Click Tools, Click "Capture new presnap", click OK.		

6.	<p><u>Perform "SET LINE CAMERA GAINS"</u></p> <ol style="list-style-type: none"> <li>1. Load an H&amp;E slide into the tray.</li> <li>2. Click the grey slide arrow in the first box.</li> <li>3. Click the camera to take "snapshot"</li> <li>4. When snapshot is done, click the blue bar on the right side of the first box.</li> <li>5. When arriving at the "edit" screen, click "tools", "set camera gains". When 20X (or 40X) is done, change to the other optic and repeat. Switch from 20x to 40x by using the black knob/lever within the scanner called the "optical doubler"</li> </ol>	THIS MUST BE DONE EACH TIME YOU START TO SCAN SLIDES.
7.	<p>Load up to five slides in the tray. Make sure the slides have the label and coverslip side up and are seated in the tray with the label at the left side of the tray.</p> <p><u>**Be sure to use the alcohol wipes and kim wipes to clean the slide before insertion in the tray to avoid fingerprints and dirt.</u></p> <p>**Click on the arrow in the top right corner of the large box. Choose "Mark all slides for scanning". The boxes will turn tan with light tan strip on left side-slides are ready for Snapshot. Snapshot is used to take a prescan image of the slide to preview/ make adjustments for the actual scan to ensure quality scanning.</p> <p>If there are less then 5 slides to scan. Select the spots 1-5 on the tray by clicking the green checkmark at the left side of the tray to assign the scan location of the slide-turn tan. Then click the middle arrow beneath the green checkmark. The end of the slide will turn light tan; designating slide ready for Snapshot.</p> <p>**Bottom left, click on "Snapshot" camera icon.</p>	

<p>8.</p>	<p>Hold the mouse on the prescanned image. There will be a blue bar that appears on the right side of the image which is the "Slide view". Edit each slide by clicking on the slide view.</p> <p>Enter name (Last name, first name, MI) in top left line-<i>click save</i>,</p> <p>Enter case number (DCO, MS, MH, SS, etc; followed by what the slide is (HE, ICH, special stain AFB, GMS, etc) (MS16-1234 AFB)- <i>click save</i>.</p> <p>Manual setup-"Slide type" enables a choice regarding slide description for scanning ex: faintly stained, blood smear, skip blank stripes.</p> <p>Manually add more focus points (yellow dots that appear on the tissue after prescan). The focus points are used by the camera for scanning. Default adds a certain amount of focal points and more can be added with using the slide bar or manually by right click on the tissue in prescan for "insert" or right click on a focal point for "delete".</p> <p>Right side of screen-Manual Setup Icons.</p> <p>1. Auto select tissue, 2. Auto select calibration focal points.</p> <p>3. Autofocus all focal points, 4. Capture a calibration image,</p> <p>5. Use default calibration image.</p> <p>All H&amp;E slides should be scanned at 40X. The rest can be scanned at 20X.</p>	<p>Red outline is the slide area.</p> <p>Green outline is the scan area. Adjust green area to the tissue you want scanned. The blue diamond must be inside the green box.</p>
-----------	--	---

10.	<p>When you have finished reviewing all 5 slides, you can go back to the original page, using the blue arrow in the circle at the top right of the page, and hit the green “SCAN” button (lower right). In Slide View mode, the scanning process can be observed with the yellow focal points turning green.</p> <p>After the slide has been scanned, the slide location in the tray will turn Green. If there were issues with the scanning process the slide location on the tray will turn Red. **If there is a slide that finished with a RED box, you will need to rescan that slide. Make sure it is clean, label side up, and is seated in the carriage well. If it doesn't scan at 40X, try 20 and make a notation in e-slide manager.</p>	
11.	<p>After the slides are scanned, enter the patient information in E-slide Manager. The user ID and password are the same as for the ScanScope. The cases are under “Clinical”; add case.</p>	
12.	<p>Enter the information in the boxes, filling in everything except ethnicity (unless you are sure of it), patient summary, and comment fields. Put in brief final diagnosis. Make sure to click add, before you do anything else.</p>	
13.	<p>Attach the slides using the “ASSIGN” tab at the top. Place a check mark on the left side of the slides you want to attach. Click “Assign”, choose “existing case”, and then find the case you want back in the list of cases; click “SELECT” along the left side of the page. When it is done loading, scroll to the bottom of the page to make sure all of the slides are there, then click SAVE. Go to the next case.</p>	

14.	Power down if you are finished scanning (MUST be done in this order per Aperio): 1-Turn off computer monitor 2- CPU 3- Aperio Scanscope CS2 unit 4- Light Source.	You can power down the CPU by using the Microsoft shutdown feature; turn off monitor when you have started this. When CPU has shut off, you can turn off the remaining units.
-----	---	---

**References**

Aperio on-line training

**Training Plan/ Competency Assessment**

Aperio On-line training - take the test at the end of each unit.

**Historical Record**

Version	Written/Revised by:	Effective Date:	Summary of Revisions
1	C. Vaidich	6/29/2016	Initial Version
Approval	Megan Dishop,MD	2/2017	
Rev:	Melissa Turner	2/2017	