NDP.view Procedures

For the best viewing options and ease of use, first download the free NDP viewer from the Hamamatsu website by visiting the following link (scroll down to **Software and manual download**):

http://www.hamamatsu.com/jp/en/U12388-01.html

Versions of the software are available for both Windows and Mac OS. A link to the user manual is also available on this page.

There are two ways to access your images:

- (1) Open the NDP.view2 software and sign in to the remote server
- (2) Access the NDP.serve site in your Internet browser. (Note that the browser version of the viewer has limited capabilities, so we recommend downloading and using the NDP.view2 software if possible.)

Instructions for using both methods are as follows.

(1) To access your images within the software:

First open the NDP.view2 software. On the main screen, make sure the Home window is open by clicking the **Menu** button in the top left corner and toggling the **Browse** button (or use keyboard shortcut **O**).



To access your files on the server remotely, click the **globe** icon in the Home window. A pop-up window will open and prompt you to enter an address.

Type the following IP address into the box and click OK: http://dcm-imagepath.compmed.washington.edu/



Note: if you have transferred your slide files directly to your hard drive and do not need to access them remotely, simply browse for the file locations in the Home window.

You will now be asked to sign in by entering your username and password.

	≗≣ Sign In
	Welcome to dcm-imagepath.compmed.washington.edu
	Please sign in
	Username SampleUser
	Password
Nanc	Sign In Cancel Ithology
	Sign in as Guest

A folder or folders containing your slide files should then be displayed in the Home window. Click to open your folder and access your files:



Click on a thumbnail to open an image. You can have multiple images open at the same time by opening a new tab, similar to in an Internet browser. Move your mouse to the top of the screen to display the tab bar and click "+" to add a new tab:



You can then open an image in this new tab.

To view different areas of the image, click and drag with the mouse, use the arrow keys on the keyboard, or use the joystick displayed in the tools widget. (Use keyboard shortcut **T** to make sure the widget is displayed).

Zooming is accomplished by scrolling with the mouse wheel or by selecting a magnification in the tools widget (see below).

Additional options for viewing include rotation, flipping, and bird's-eye view.



Tools Widget

To view two or more images side-by-side, right-click on a tab's title and select the desired layout for viewing. (Up to four images can be viewed at the same time.)





Then click and drag the thumbnail of an image to open it in the desired location.

Images can also be synchronized, which is useful for comparing similar areas. To do this, right-click on the tab title and select **Synchronize.** Scrolling and zooming will now be synchronized between the images.



Images can be captured and exported as JPG, PNG, or TIFF files. To export the current view, right-click and select **Export Image** (or use keyboard shortcut **E**).

Annotations and basic measurements can also be added to images. To access these, right-click on an image and choose a tool (pointer, ruler, circle, etc.).



You can change the name, color, and description of each annotation by hovering over it, right-clicking, and choosing **Edit**.

Measurement values can be exported as an Excel file. After placing measurements on the image, right-click and choose **Export Annotations**.

Below is a list of useful keyboard shortcuts:

Α	Show/hide annotations	Ι	Image controls
В	Show/hide scale bar	Μ	Show/hide map view
Ε	Export image of current view	0	Open/browse for files
F	Image info	Р	Settings
G	Show slide overview and label	Т	Tools widget
Н	Help	W	Bird's eye view

(2) To access your images via the NDP.serve website, navigate to this location in your Internet browser:

http://dcm-imagepath.compmed.washington.edu/

You will then be directed to this screen:

NanoZoomer Digital Pathology				
Comparative Pathology Program and Histology and Imaging Core, University of Washington School of Medicine at South Lake Union				
Please sign in				
Username Password Sign in				
Sign in as Guest				
HAMAMATSU				

Sign in with your username and password and you will then be directed to this screen:



Click on **Browse Images** and then click on your folder:



The images in your folder will appear. Click on the image you wish to view:



Images can either be viewed within the browser or exported to the NDP.view2 software, if you have it installed. To export the images, click **Settings** in the upperright corner and select **Full screen viewer for Windows** (please note that this viewer is now also available for Mac OS).

TestImage_01_H&E		Welcome SampleUser (<u>Sign out</u>) URL Settings
	Settings OViewer for Windows Internet Explorer OViewer for MacOSX, Linux, Windows and ot OFull screen viewer for Windows	her Web Browser
	Apply	

You will then be prompted to open the file with NDP.view2 or save it. Either is fine and if you wish to save the file just make a new folder where you would like the images to reside and save them to that folder.

To view the images in the browser, go to **Settings** (see above) and select **Viewer for MacOSX, Linux, Windows, and other Web Browser.**

To navigate around the image, the help menu (keyboard shortcut **H**) explains the panning and zoom features using the mouse.

You can also right-click on the image to bring up the command menu, which provides an easy interface to the most used tools the software offers. You can open multiple images at the same time for side-by-side comparison by clicking the **Open** icon:



As well as capture the current field you are viewing by clicking on the **Export** icon:



The **Status** icon will bring up an overview picture of the slide, which includes the slide label for archiving. The remaining icons are self-explanatory. Our advice is to try out the different icons to get a feel for the capabilities of the software.

If there are any questions please don't hesitate to contact Brian Johnson at the Histology and Imaging Core:

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