

מרכז דימות מרכז תשתיות ביורפואי הפקולטה לרפואה ע"ש רות וברוך רפפורט הטכניון - מכון טכנולוגי לישראל

Instruction OlyVIA 2024-06-20-a.docx 2024-07-01

# **OlyVIA for Olympus VS200 Slide Scanner**

## Installation

Download OlyVIA v. 4.1.1 on Windows 11 and install

https://www.olympus-lifescience.com/en/downloads/detail-iframe/?0[downloads][id]=847254102

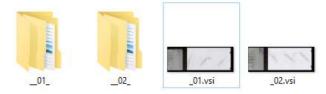
OlyVIA v. 3.4.1 on Windows 10 and install

https://www.olympus-lifescience.com/en/downloads/detail-iframe/?0[downloads][id]=847253920

## File types

The files from the scanner consist of a small file that manages them and a folder by the same name. If you rename, rename both to the same name.

Each slice is a different layer.



### Open file

Double click on the vsi file to open in OlyVIA.

The whole slide opens including the label



Right click to zoom in and out

Zoom in and out with the mouse wheel

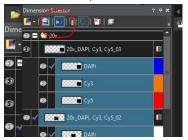
If you cannot see something go to view  $\rightarrow$  tool windows  $\rightarrow$  e.g., dimension selector/adjust display/properties Annotations: view  $\rightarrow$  toolbars  $\rightarrow$  drawing

## Dimension Selector

On the left hand side you have the different layers (each slice, overview, label).

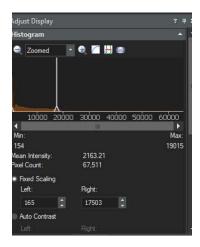


You can also separate the channels:

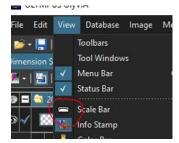


You can change the pseudocolor by clicking on the color to the right of the name of the layer





To add scale bar: view → add scale bar (there is no way to change the format and place)



To save the image with the scale bar: file  $\rightarrow$  save display as:

Click on a slice to select.

It will be selected on the list (alternatively click on the list and it will be selected on the central window)

In Adjust display  $\rightarrow$  histogram check "fixed scaling" to see any changes you make. Press "default" to undo changes

## To crop

Right click on the slice on the list to extract to a new file: "extract layer"



#### (it can take some time)

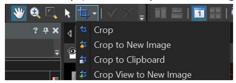


This will result in a new file which you can save as tiff if small enough (2GB?) or vsi to open in imagej (do not open the original vsi as it is composed of layers and only the first layer is calibrated).

You can synchronize side-by-side windows



You can crop (alternatively find it in Image menu)



To open vsi in ImageJ go to plugins → bio-formats

Open only the first series (it is also the only calibrated one).



It will open as three different channels

To combine them go to:

Image → Color → Merge Channels

Image → color → stack to RGB

ImageJ is limited by the RAM of your computer, if you cannot open in ImageJ (where you can export to TIFF) you can open in QuPath.