**ImageJ/Fiji script: Timeseries with/w.o stacks to hyperstack or maximum intensity projection per field**

**Purpose:** To convert images from multi-dimensional time-lapse acquisitions on the Phenix to .tiff hyperstacks for easier overview of the acquired images from each field.

**Information required:** Before starting, have your .tif image files exported from the Phenix in a folder without any other types of files in the same destination (Make sure to remove the index file produced upon export). Make an empty folder for the output. Then fill in the information in the rows 5-13.

5: Put in the date of your experiment for the output to be named with this first

6-7: Put in the range of the rows you want to convert as numbers (e.g. A=1, B=2 etc.) with the min and max

8-9: Put in the range of the columns to be converted with the min and max

10: Enter the number of planes in the acquisition. If no stacks were acquired enter 1.

11: Enter the number of fields per well.

12: Enter the number of timepoints in the acquisition

13: Enter the number of channels in the acquisition

14: Maximum intensity projection or hyperstacks. If you want the hyperstacks to be converted to maximum intensity projections with all of the planes acquired, enter 1, if you rather want to be able to view the individual z-sections in a hyperstack, leave as 0.

**Run the script:** Press the run button, select the folder for the input images and the destination for the output. Check in the imagej bar that “Opening:” appears indicating that the files are being opened and processed. If the above information has not been entered/done as instructed, an error will appear.

**Timing:** The script takes approximately 100 seconds per field for an example time-lapse with 13 timepoints, 5 planes and 3 channels.

**Output:** The output files will be either hyperstacks (If MIP = 0) with the channels, z-sections and timepoints as the three dimensions for each field or the maximum intensity projections with the channels and timepoints as the two dimensions.

**Note:** Make sure to delete the exported unprocessed images if not needed further, to avoid cluttering the servers!

**ImageJ/Fiji script: Wells, fields, stacks to hyperstacks or maximum intensity projection per well**

**Purpose:** To convert images from multi-dimensional acquisitions on the Phenix to .tiff hyperstacks for easier overview of the acquired images from each well.

**Information required:** Before starting, have your .tif image files in a folder without any other types of files in the same destination (Make sure to remove the index file produced upon export). Make an empty folder for the output. Then fill in the information in the rows 5-13.

5: Put in the date of your experiment for the output to be named with this first

6-7: Put in the range of the rows you want to convert as numbers (e.g. A=1, B=2 etc.) with the min and max

8-9: Put in the range of the columns to be converted with the min and max

10: Enter the number of planes in the acquisition. If no stacks were acquired enter 1.

11: Enter the number of fields per well.

12: Enter the number of channels in the acquisition

13: Maximum intensity projection or hyperstacks. If you want the hyperstacks to be converted to maximum intensity projections with all of the planes acquired, enter 1, if you rather want to be able to view the individual z-sections in a hyperstack, leave as 0.

**Run the script:** Press the run button, select the folder for the input images and the destination for the output. Check in the imagej bar that “Opening:” appears indicating that the files are being opened and processed. If the above information has not been entered/done as instructed, an error will appear.

**Timing:** The script takes approximately 90 seconds per well for an example well with 10 fields, 5 planes and 3 channels.

**Output:** The output files will be either hyperstacks (If MIP = 0) with the channels, z-sections and fields as the three dimensions for each well or maximum intensity projections with the channels and fields as the two dimensions.

**Note:** Make sure to delete the exported unprocessed images if not needed further, to avoid cluttering the servers!

**R script: Renaming of phenix images for analysis in ScanR analysis**

**Purpose:** To rename images acquired on the Phenix and exported to comply with naming conventions used in ScanR analysis software. Script would need adaption for time-lapses

**Information required:** Before starting, have your .tif image files in a folder without any other types of files in the same destination (Make sure to remove the index file produced upon export). Then fill in the information in the rows 3-7.

3: Enter the number of columns in the multiwell plate (12 for 96w plates and 24 for 384w plates)

4-7: Enter which dyes correspond to the respective channels. If you have fewer channels than indicated, just enter for the ones necessary.

**Run the script:** Run the script. When prompted to, select the folder with the images to be renamed.

**Timing:** The script takes 2-4 seconds for around 1000 images.

**Output:** The files in the folder will be renamed to comply with conventions used in ScanR analysis and can then be used for custom conversion and further analysis in this software.

**Note:** Make sure to delete the exported renamed images after custom conversion if not needed further, to avoid cluttering the servers!