Microscope Video Capture Quick Reference Sheet

Setup:

- Open VirtualDub
- To activate the camera, select 'File', and 'Capture AVI'
- Select 'File', and 'Set Capture File'
 - o Select where you would like to save the resulting video, and what you would like it to be called

Settings:

- To adjust video resolution, select 'Video', and 'Capture Pin'
 - o This menu provides three resolution options for your video
 - o Keep in mind that higher resolutions lead to drastically larger files
- To adjust brightness and frame rate, select 'Video', and 'Capture Filter'
 - O Adjust the exposure time to the approximate time you want in between frames (Ex. $10 \text{ fps} \sim 0.1 \text{s}$ exposure time)
 - O If your video becomes too dark or light to see, you can adjust the light on your sample using the iris.

Capture:

- To adjust the length of the video, select 'Capture', and 'Stop Conditions'
 - o We usually only need videos of around 5-10 seconds
- To see what your video will look like without saving, you can select 'Capture' and 'Test Capture'
- To capture and save your video, select 'Capture' and 'Capture Video'
- Record the frame rate of your video
 - O You can find the frame rate in the information panel on the right of the video capture screen, under the video tab and next to the label "average rate"

Other Notes:

- Keep in mind, different videos will have different frame rates
- If you change the resolution of your video, or the objective you are using, the distance-to-pixel ratio will change