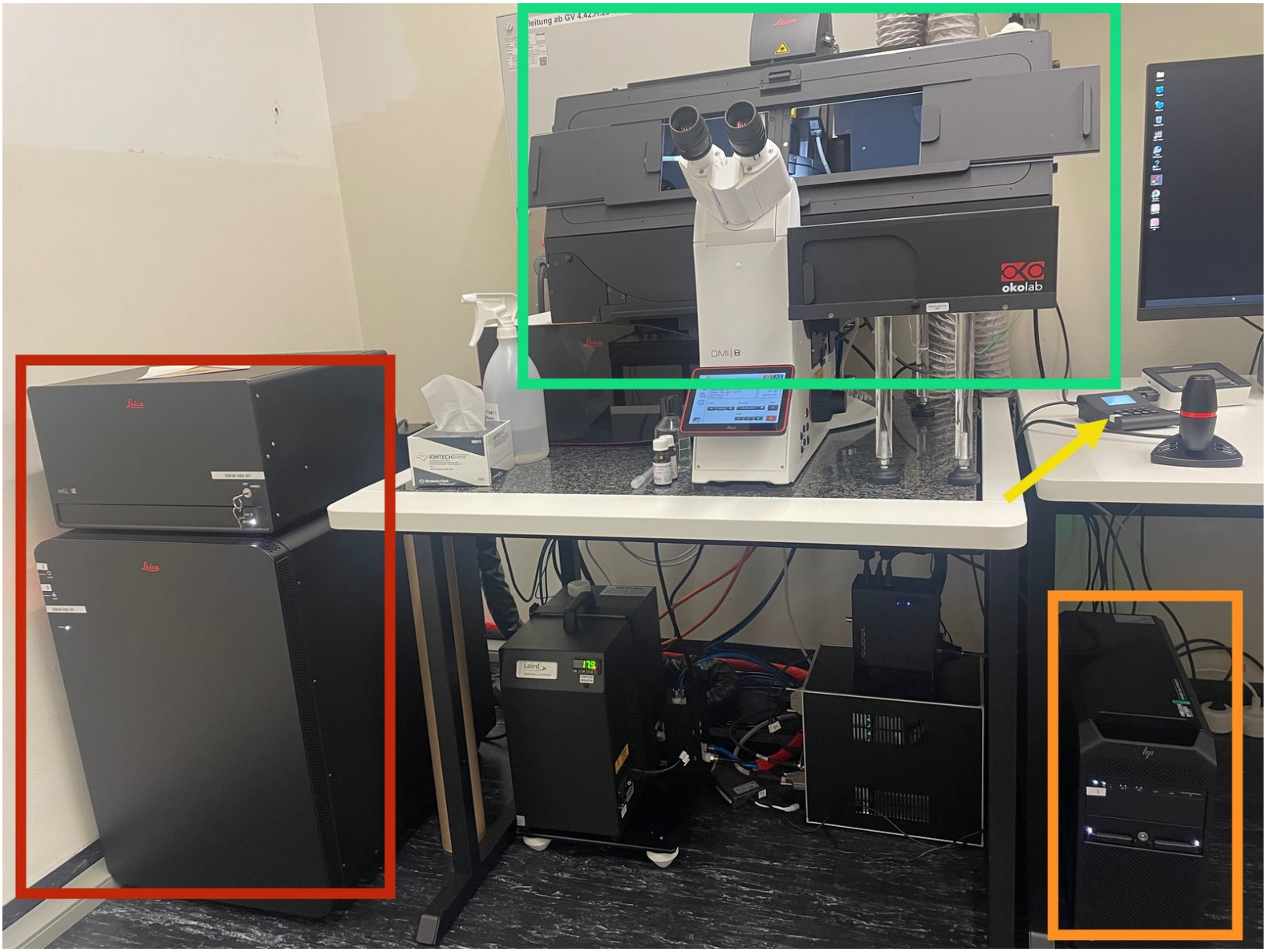
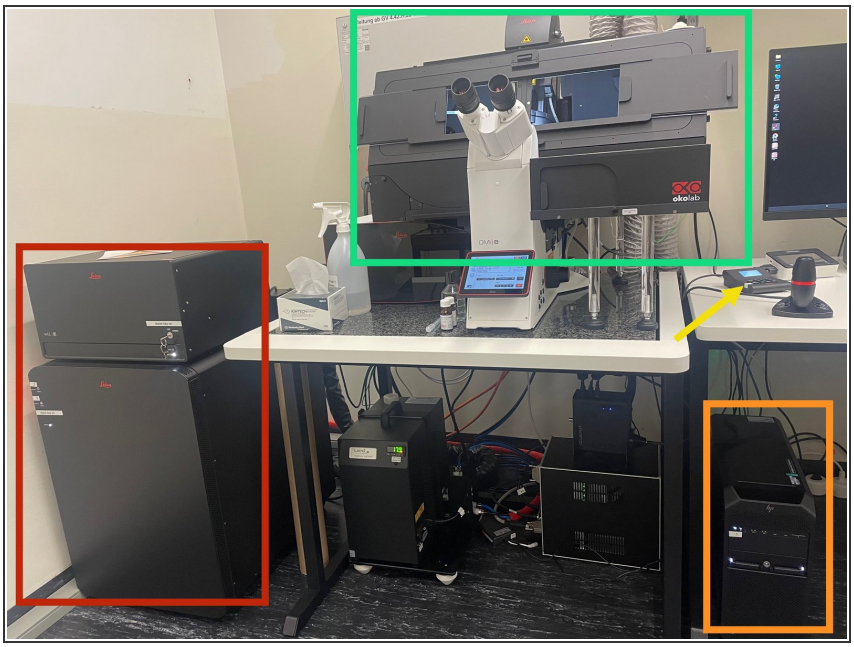
Leica Stellaris 1: Start-up

Written By: z mbstaff

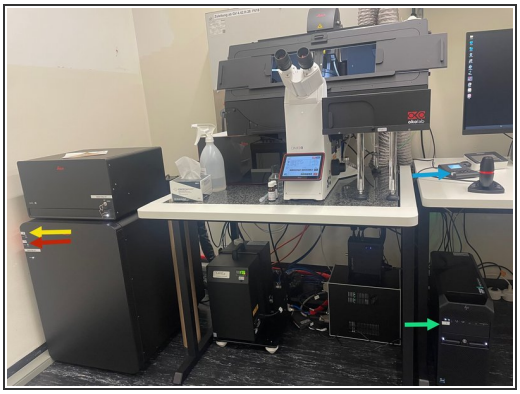


Step 1 — Hardware



- Lasers and main power supply
- Microscope stand with live cell incubation box
- Control-PC
- Controller LED for eyepiece

Step 2 — Power switches





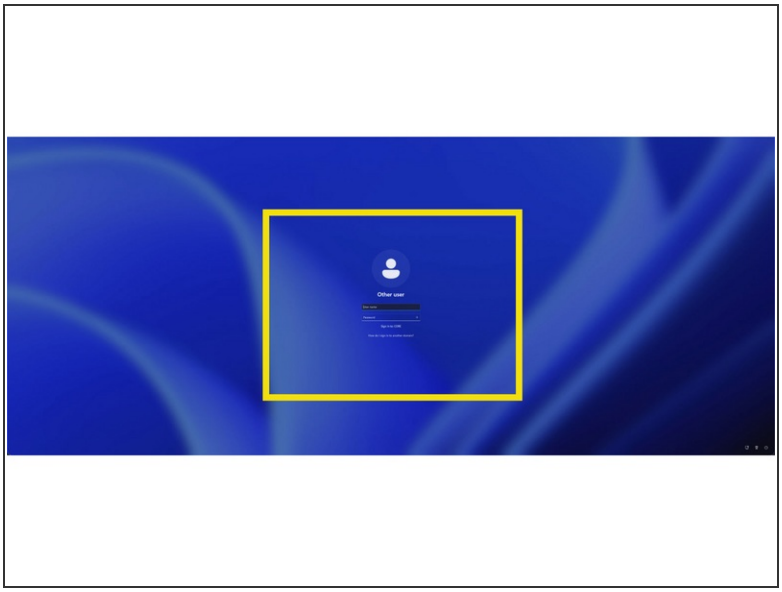


ⓘ Switch on the following components to use the microscope.

- 1: Control PC
- 2: Microscope power supply
- 3: Laser power supply
- 4: Eyepiece lightsource (*optional*)
- press **ctrl+alt+del**, to log in, when the computer is booted

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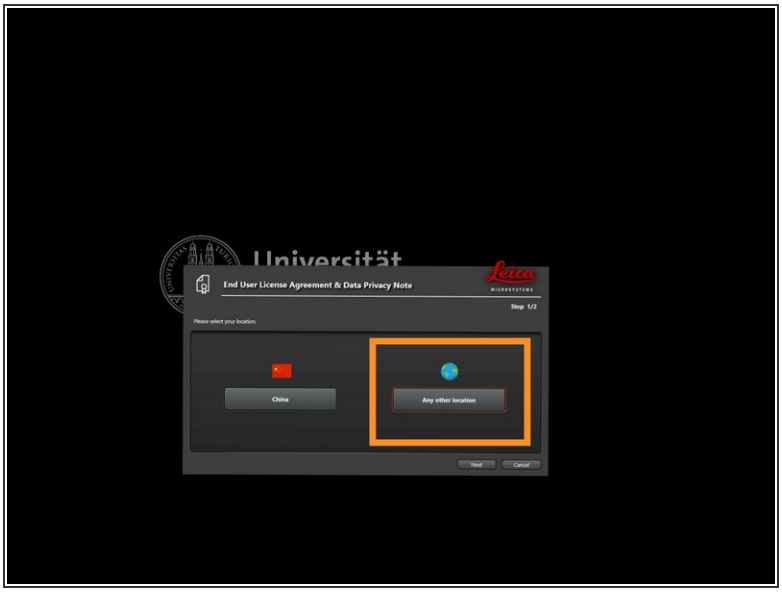
Step 3 — Login and start LASX

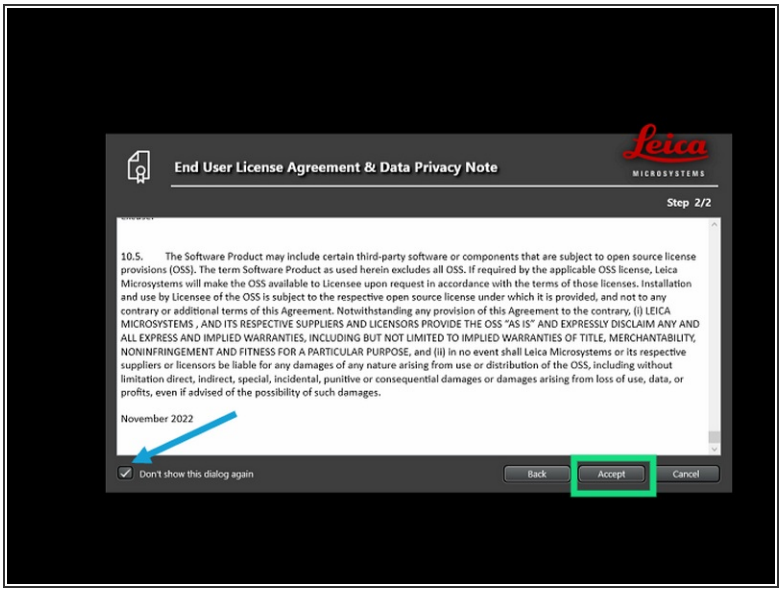




- log in with your zmb core account
- start **LASX**

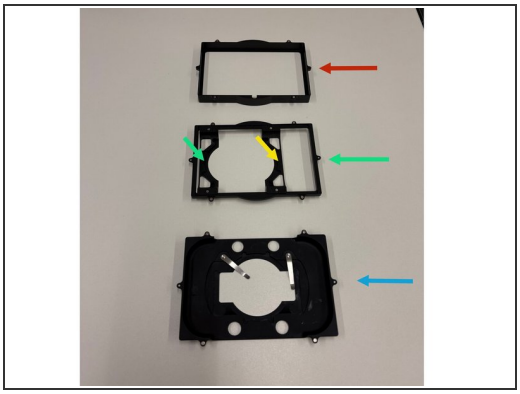
Step 4 — license agreement (only first login)

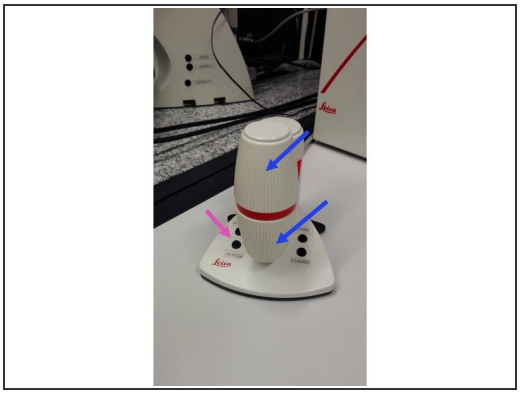


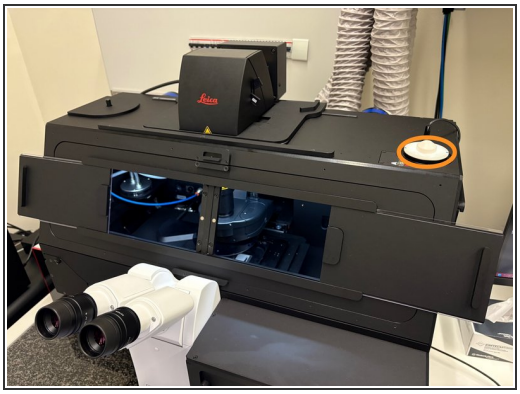


- choose any other country to use all software functions
- checkmark here to save setting
  - agree to continue

Step 5 — Mount and position your sample



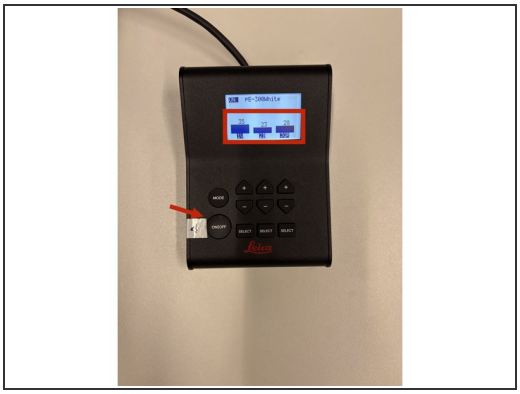




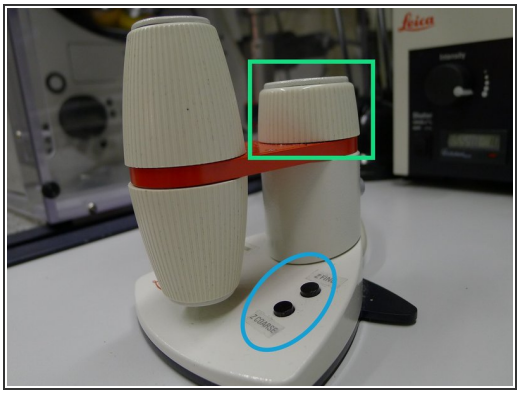
- Choose from the available sample holders.
  - Well-plate holder
  - Flexible slide/dish holder
    - Fixed part
  - Fixable slide holder
- XY stage movement
- Toggle between coarse movement "XY Fast" and slow movement "XY Precise".
- When mounting the sample, turn on the light in the environmental box by rotating the knob

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Step 6 — Focus your sample





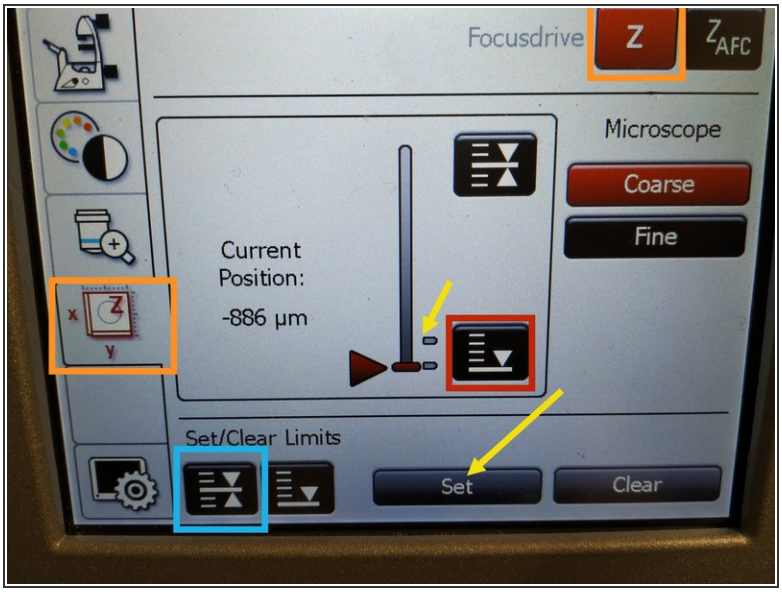


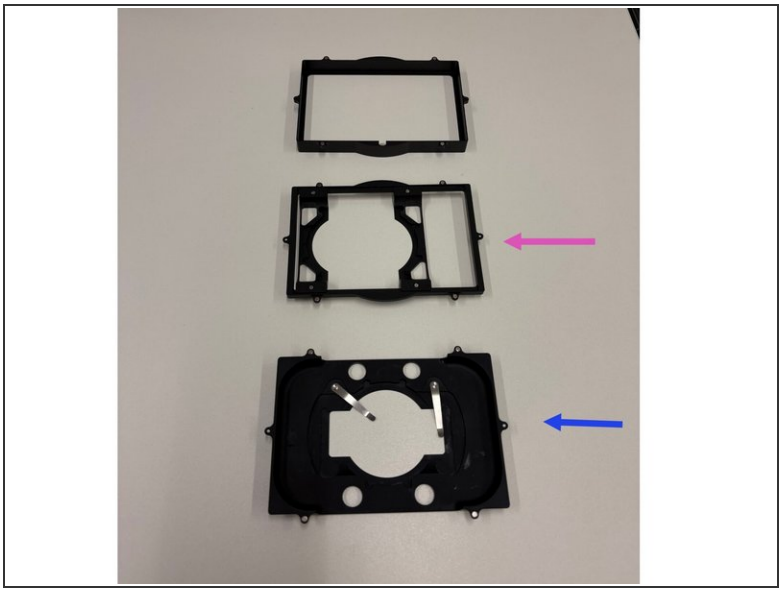
- Make sure that these blocks are fully colored. If they are striped - press ON/OFF button again
- Click **"FLUO"** and choose an appropriate "FLUO-Filtercube" : e.g. "GFP".
- Open the **"IL -Shutter"** (if activated the dot is yellow).
- Look through the oculars and focus your sample by using:
  - the z-wheel on the external controller.

  ⓘ Moving sample upwards (towards objectives) turn z-wheels clockwise/away from you. Moving sample downwards (away from objectives) turn z-wheels counter-clockwise/towards you.

  - Toggle between "Z FINE" and "Z COARSE"

Step 7 — Save your focus position (Optional)



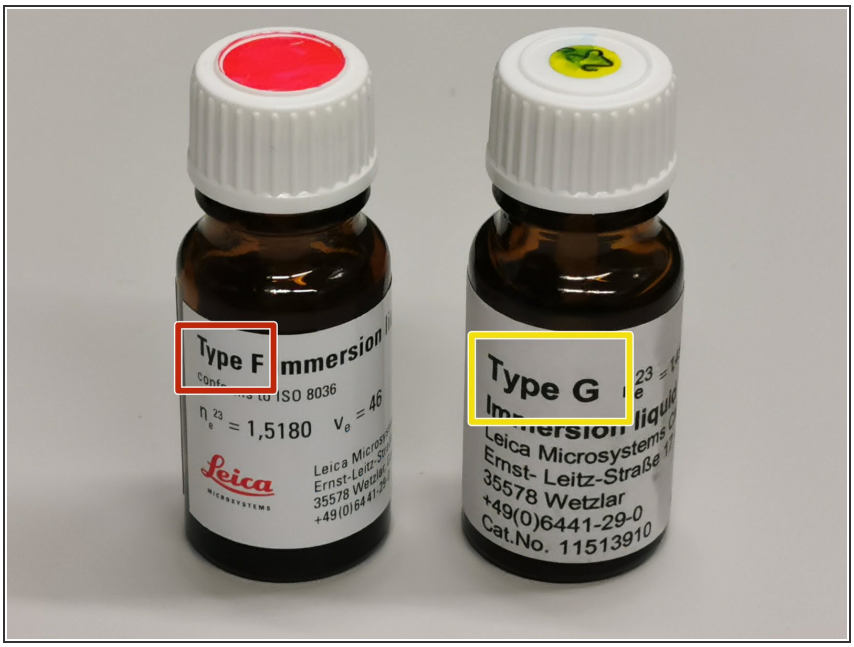


- The storage of the focal plane is helpful in order to find the focus back if the sample or objective will be changed.
- To save your current focus position select the "xyz tab" and the "Focusdrive Z" on the touchscreen of the microscope.
- Click the **"Focus-Position"** button.
- Press **"Set"** and the line will be updated
- Press the **"Lower Limit"** button in order to move down (for safe change of the objective or the sample).

⚠ **For different sample holder you will have different Focus-Position Level!**

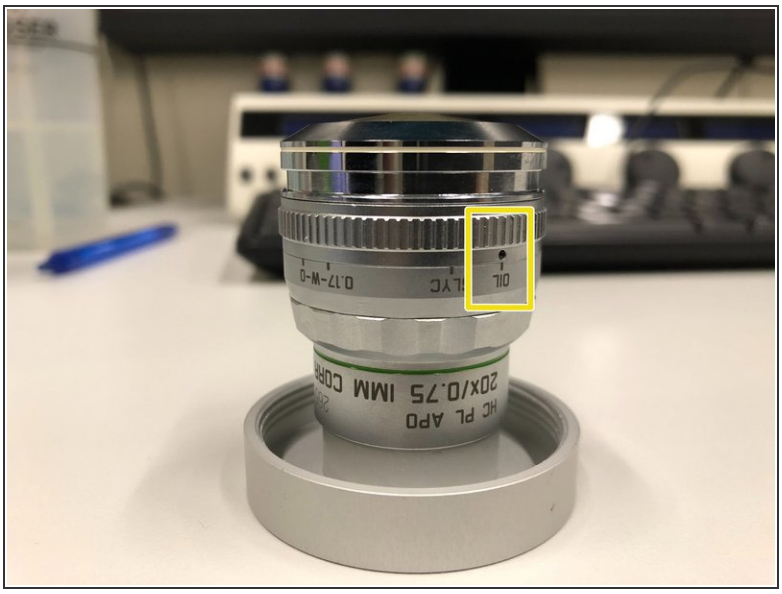
- The Adjustable/Flexible one, has the focus significantly higher then the Fixable one

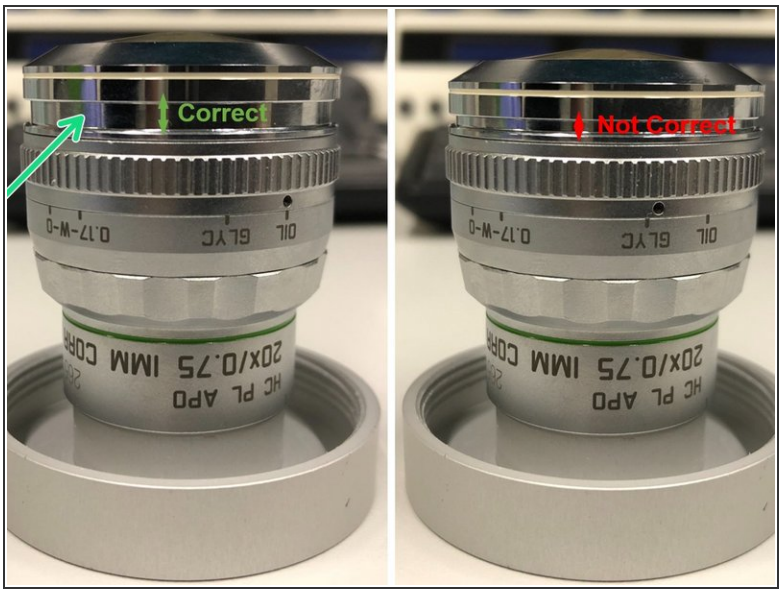
Step 8 — Switching to higher magnification



- Lower the stage. Toggle within the software to the objective of choice.
- ⓘ Depending on the objective different immersion media will be used. Apply directly on the sample.
  - Oil objectives: "Type-F" immersion liquid.
  - "Glycerin" objectives: "Type-G" immersion liquid .
  - "Water" objectives: ddH2O (always use fresh).
- Mount your sample again and press the "Focus-Position" button.

Step 9 — 20x IMM objective - IMPORTANT information





⚠ For optimal imaging performance on some objectives the correction collar has to be adjusted.

- **20x IMM** (multi-immersion - Oil, Glycerin or Water) needs to be set to the **corresponding immersion media** ("OIL", "GLYC" or "0.17-W" (with cover glass) or "W-0" (without cover glass)).
  - Make sure that the cap of the spring-loaded front lens is released (working position).

⚠ DO NOT remove the objectives for adjustment. They can be also accessed on the system.