Horizontal Zeiss 880 – Basic Instructions

Starting the system for image processing only (you do not need microscope)

- Start the computer only, log in (no password), start ZEN black or blue software and choose image processing. (Do not turn on any of switches on the table, it is not necessary.)

Starting the system for microscopy

- If you do not need epifluorescence, switch off the UV lamp BEFORE starting the system.

Turn on system according labels 0-5
0) fain on the wall
1) MAIN SWITCH
2) SYSTEMS/PC switch
3) start PC All in one (at monitor on the wall)
4) start PC under the table
5) COMPONENETS switch

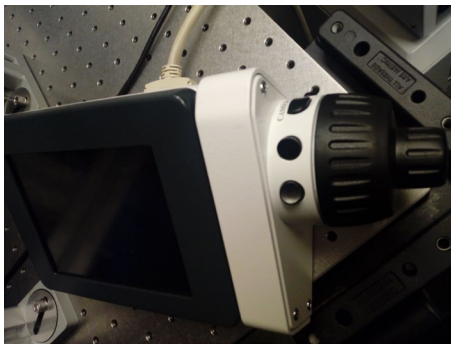
Log in as:
(no password)

(please do not use your private login name)

- Start ZEN **black** software and choose START SYSTEM.

Specific for horizontal microscope:

- As oculars are high you can see your object instead of in oculars on AIO monitor. How to do that?
  - use mouse belonging to AIO PC and to Start LIVE in Zen blue SW on AIO
  - go to Locate in Zen black on main computer
  - select desired optical configuration (GFP,…)
  - switch camera/PC button (see photo) (this bottom redirects the light path from oculars to camera view on AIO monitor)
  - return back from camera view to imaging mode by camera/PC button again



- Do you want to acquire DIC/TL image? Return condenser to correct position indicated by black line.

Turning off the system: Shut down the main computer; AIO PC and turn off switches 5, 2, 1, 0. (Do not do anything with the metal key).

Otherwise is the system analogical to our “old” LSM880.

Microscope

- In LOCATE menu select your optical configuration
- On microscope touch panel select OBJECTIVE you want to use
- Press LOAD POSSITION
- Put the correct immersion on the objective, insert your sample, focus it manually and press SET WORK position. Next time use ⏃ to refocus your sample from LOAD POSSITION
- start the fluorescence with hand fluorescence switch
- If you change your sample please ALWAYS go down with table to avoid objective damages. Use LOAD POSSITION on touchpad or ⏄ on microscope body, load new sample/slide and refocus with ⏃

Acquire Image

- Start lasers you need (it takes few minutes)
- Use ACQUIRE to see the image on the monitor. Select optical CONFIGURATION from database. Adjust gain, pinhole, laser power, optimal resolution. IMPORTANT!!!!! LSM880 detection is much more sensitive compared to LSM5. Therefore **laser power should be typically LESS than 2%.** Anything more than 10% is wrong (sample is not focused, Arg laser is in stand-by…). Please do not use high laser power because it reduces the live of the detectors.

Saving your data

- Preferable: save your data on IF disc station \\ds-ueb-if.ueb.cas.cz\home OR on your P: drive \\ds.asuch.cas.cz\home (you have to map the disc station (see instructions), login as in asuch domain)
- Save your data locally on D:**DATA**\your name
- Please **do not** save your data anywhere on C: drive!!!! (In case of any problem with system your data would be lost)

After Work

CLEAN immersion objectives (if used) (water immersion – just dry) > COVER the microscope > SIGN in the book

Enjoy! Katka l.**435,** 732 271 456