### LCAM startup manual, Zeiss AxioScope A1 (A2.34)

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**Information microscope:** http://www.lcam-fnwi.nl/facilities/axioscope/



#### **Startup procedure**

- 1. Switch on the microscope body using the 0/1 button at the left back of the microscope body.
- 2. Switch on the power supply of the HBX 120V metal halide lamp. Note: After switching off the lamp has to be cooled for at least 15 minutes before turning on again.

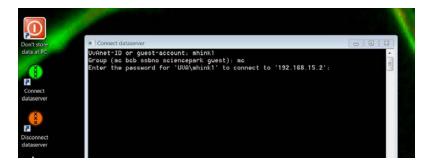
## Startup procedure for use of Axiocam camera

- 3. Start up PC-AxioScope. By default the computer should start up in Windows mode. If starting up as a Mac, press the ALT button while restarting and then select the Windows system.
- 3b. In case the computer ahs been switched off: Dis- and Re-connect the camera cable at the back of the computer in order to make contact
- 4. User: *imcb*, Password: *imcb*
- 5. Never store data on the local harddisk, all data should be stored at the dataserver.

  Data present on the local PC will be <u>deleted without further notice</u>. Be aware that the storage of data on the sever will be your own responsibility as well.

  Contact Mark Hink in order to get access from your office computer.

  Login using the green **Connect dataserver** icon at the desktop: Type your userID (UvAnetID), group and password. After succesful login a network drive U:\ will be visible where you should store your data.



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### Visual inspection

- 6. Make sure the slider near the eyepiecer is in the *Eye* position.
- 7. When using an oil-immersed lens: Only use Zeiss oil (no Nikon or Leica oil!).
- 8. White light from the bottom can be blocked by turning the bottom wheel to position 3. Light intensity can be modified by the other bottom wheel or the diaphragm ring at the light output.
- 9. For detecting fluorescence select one of the 6 filtercubes by turning front wheel (#1-6) at the front of the mic. You will feel a 'click' at the wheel when the filtercube is at the correct position. For Brightfield detection (=white light) use cube #1 (BF).
- 10. Mercury lamp light will be used when activating opening *Shutter* button at the power supply. Mercury lamp light intensity can be modified by using the *Brightness* dial at the power supply (or alternatively by the "F" and "A" wheels at right side of the microscope body).

#### Acquire images with Axiocam camera

- 11. Make sure the Nikon DS-RI2 camera is switched on (at the top of the camera).
- 12. Make sure the slider near the eyepiece is in the *Camera* position.
- 13. Turn on the Nikon NIS Elements software.
- 14. In the right column you can modify the camera detection settings. You can change the resolution (esp the one for the acquisition, "Capture") and the exposure time of the camera.
- 15. In the *Camera* section you will find four buttons for *Live* acquisition, *Freeze* and to make your final image using *Capture* (or Auto).

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## **Switching off (general)**

- 1. Disconnect from the Sils-s0 dataserver using the red desktop icon.
- 2. Turn off the software NIS Elelemnts and turn off the PC.
- 3. Switch off the microscope body using the 0/1 button.
- 4. Switch off the power supply of the HBX 120V mercury lamp.
- 5. Clean the oil objectives using the special lens paper tissues.

# **Available objective lenses:**

Plan Neofluor 5x/0.16 Pol (Air)

Plan Apochromat 100x/1.4 PH3 (Oil)

Plan Apochromat 60x/1.4 PH3 (Oil)

Plan Apochromat 20x/0.6 (Air)

# **Available filtercubes:**

- 1. Brightfield (=white light)
- **2. DAPI**
- **3. CFP**
- **4. GFP**
- **5. YFP**
- 6. TexasRed

