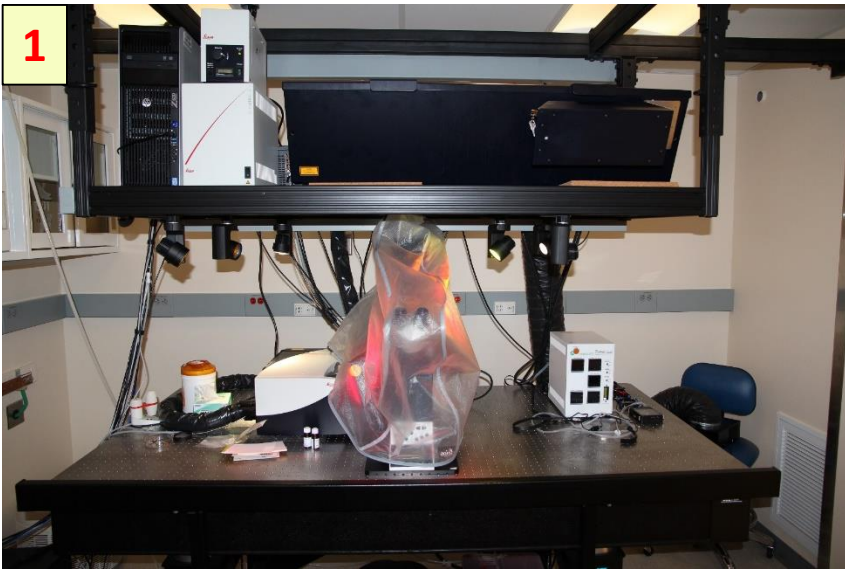


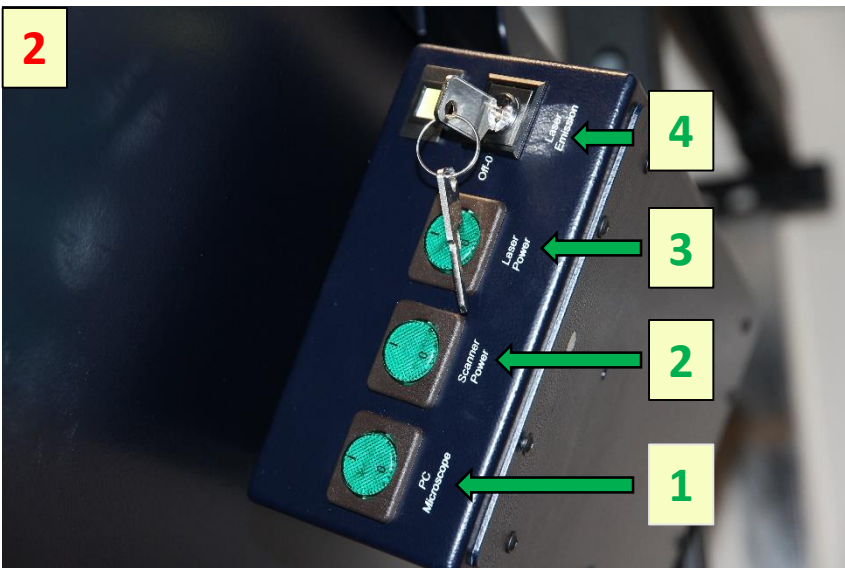
Quick Start – Laser Scanning Confocal (SP8) West Campus Imaging Core

1



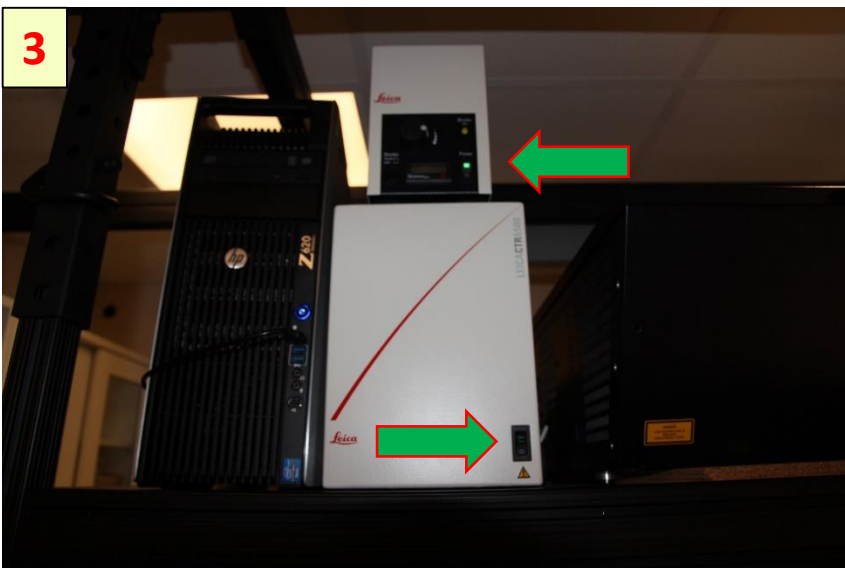
Remove the microscope cover.

2



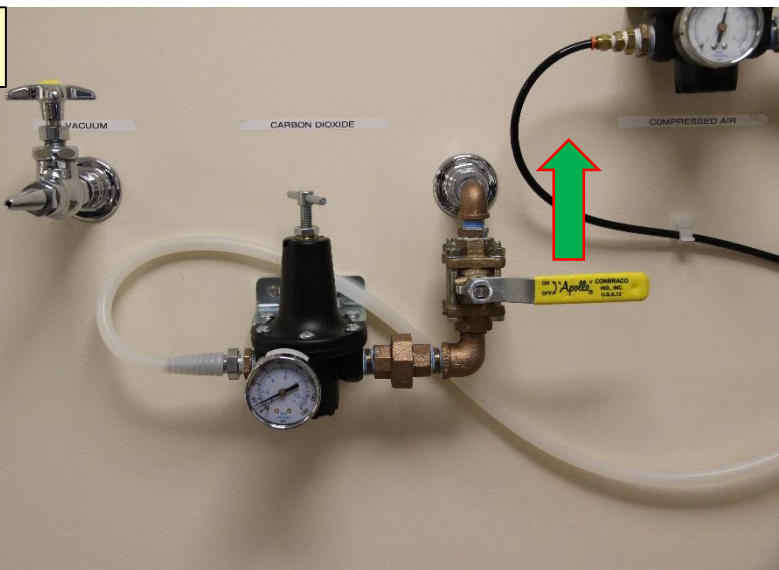
Turn on the power supply for the PC 1 , the scanner 2 and the lasers 3 by pushing the green buttons and turn the laser key 4 , to open the laser shutter.

3



Turn on the microscope control unit and the source of light.

4



To use stage top incubator, turn On the CO2 gas valve

5



Turn On the Tokai Hit power, to use the incubator

6

Yale Central Authentication Service

Login required
You may establish Yale authentication now in order to access protected services later.

NetID:

Password:

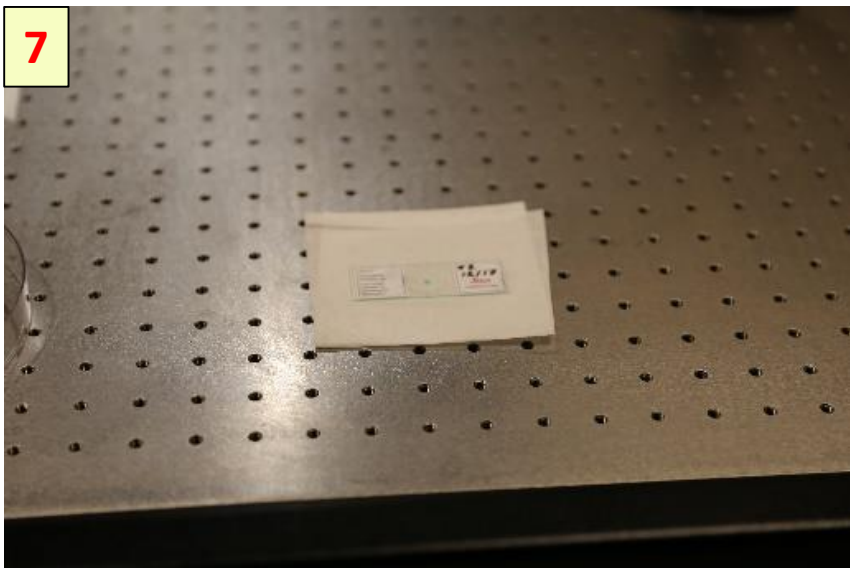
Warn me before logging me in to other sites.

Please note
Before entering your NetID and password, verify that the URL for this page begins with: <https://secure.its.yale.edu>
To protect your privacy, quit your web browser when you are done accessing services that require authentication.

CAS Login
CAS Logout
Help with CAS
Feedback
Forgot your password?
Changing your password

Using your Net ID and password login to FOM software. Start LAS-X by double-clicking the LAS-X icon.

7



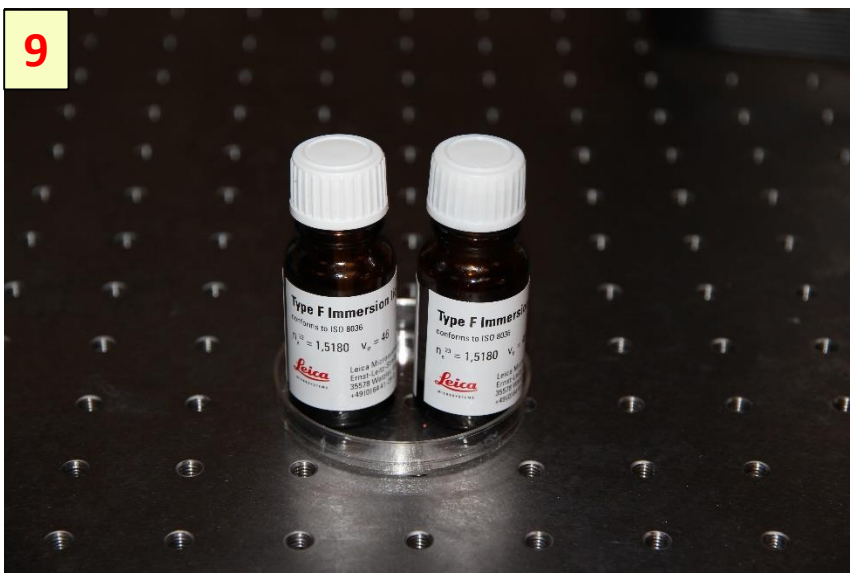
Place the slide/dish on a clean surface.

8



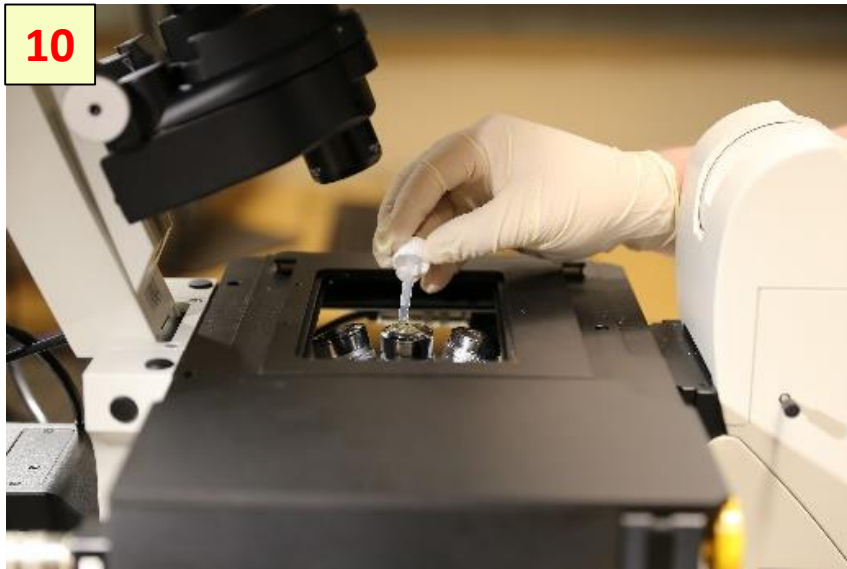
Select the objective lens and use the Lens Tissue to clean the lens.

9



Use Leica Type F liquid for oil immersion objective lens.

10



Put drop of oil on lens of the immersion objective

11



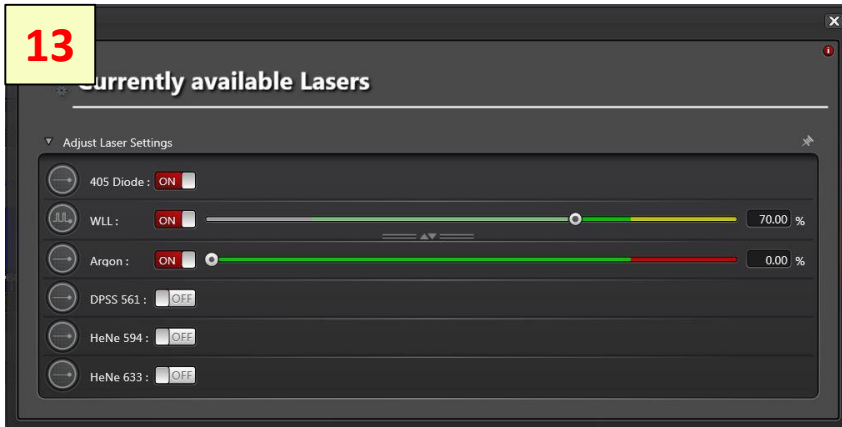
Install the slide/dish holder or the incubator

12



Install slide or dish above the objective lens

13



Activate the lasers

14



Image Acquisition

- Set excitation laser line(s)
- Activate PMT/HyD (On)
- define Gain and Offset
- Position PMT slider at maximum emission
- Start Live scan

15

XY: 512x512 | 400 Hz | 1.00 | 1.00 AU

Z-Stack : 20 μ m | 68 Steps

Begin

End



End [μ m] :

10.00

Begin [μ m] :

-10.00

Z Position [μ m] :

0.00

Focus [μ m] :

0.00

Z Size [μ m] :

20.00

Re-Center

Stack Direction (Z) :



-End-

Focus

-Begin-

z - Galvo



Nr. of Steps

68

Z-Step Size

0.30

System Optimized



Z-Compensation :

none



Galvo Flow :



OFF

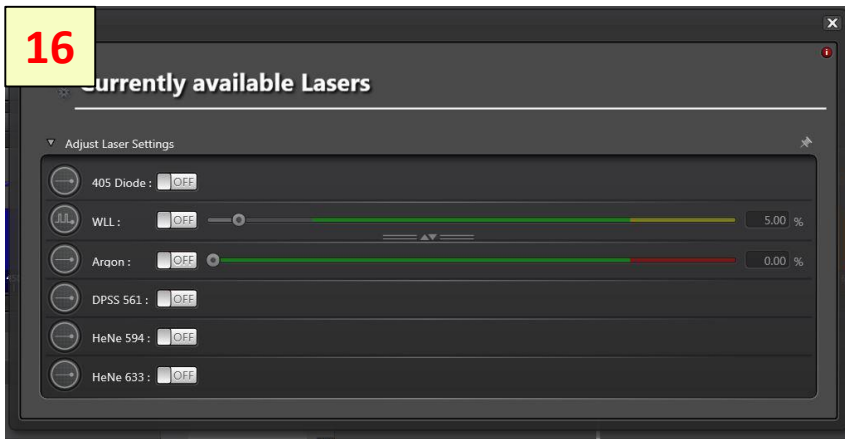
Travel Range [μ m] :

500

Z-Series Acquisition

- Open Z-Stack Dialog
- Set Focal Plane
- Set Begin- and End-Position
- Click System Optimized to define the number of slices
- Click **Start** to acquire the z-series

16



System Shut Down

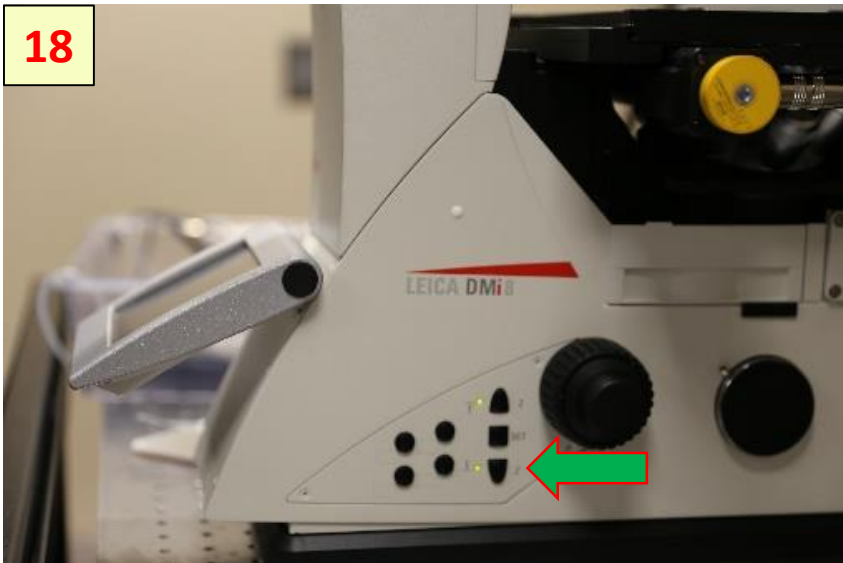
- Deactivate all
Turn off the CO2 gas valve
window
- Close LAS-X software
- Logoff in FOM window

17



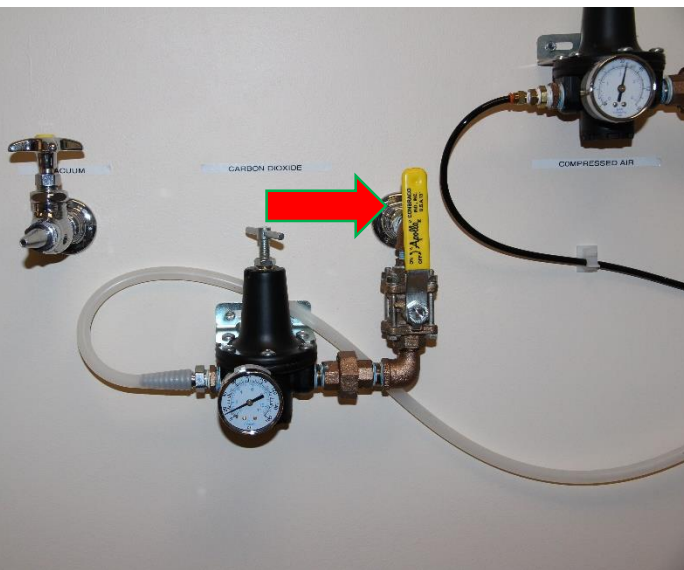
Clean the objective lens using Lens Tissue

18



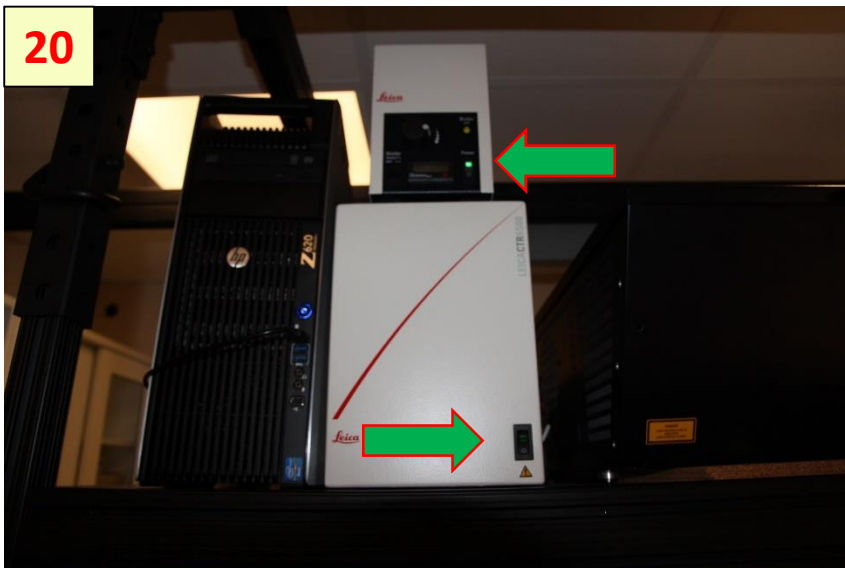
Move the objective to home position

19



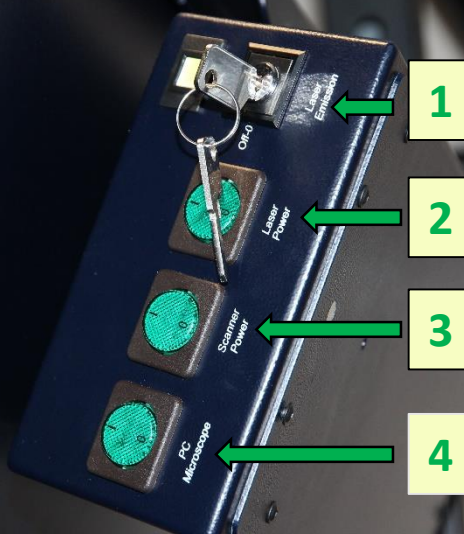
Turn Off the CO2 gas valve

20



Turn Off the microscope control unit and the source of light.

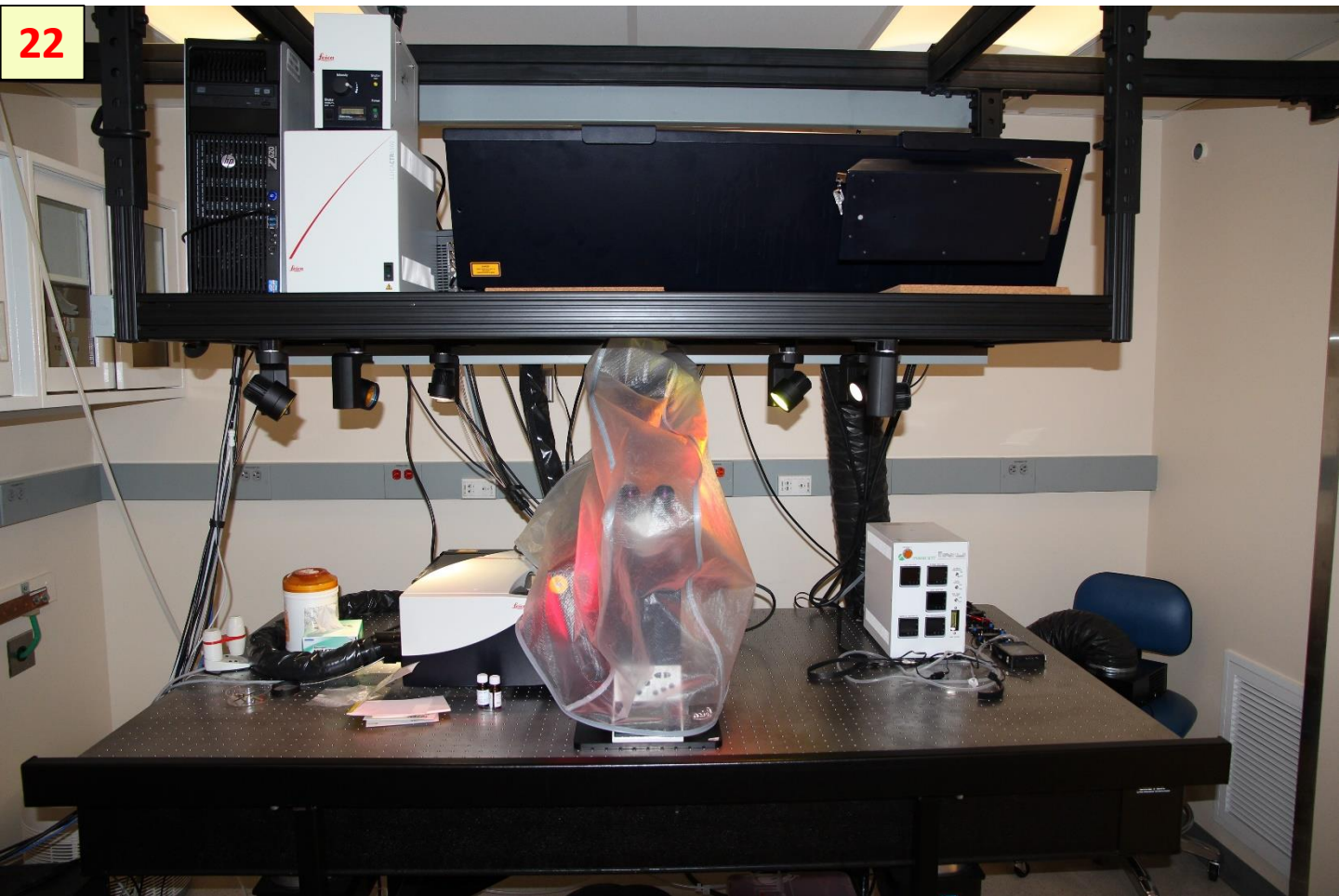
21



Turn Off the power supply:

- turn the laser key 1 , to close the laser shutter
- 2 the laser power
- 3 scanner
- 4 PC

22



Put the microscope cover above the instrument