Zeiss Axiovert 200M for Brightfield Imaging (Drug Discovery Building, DD 526)

Before using these instructions make sure you have had at least one training session on using the system.

Please report any problem with the microscope or any other component immediately to the facility manager: Monika Gooz (beckm@musc.edu) (843) 494-3700. Thank you.

This microscope is part of the BD CARV II system.

Operating instruction:

1. Switch on the microscope using the green button on the right hand side of the microscope.

2. The computer will prompt you to enter your e-mail address and password that was created for ilabs. This account is also used for tracking users and their usage time for billing.

3. Select the objective lens that you intend to use for the experiment. Use the black buttons labeled as Objectives on the right hand side of the microscope for this. Make sure you use the appropriate immersion medium. Do not use the wrong medium as it will damage the lens. The following objectives are available on the microscope:
    A. 4X dry lens
    B. 10X dry lens
    C. 20X dry lens
    D. 40X oil immersion lens (use Zeiss 518F immersion oil)
    E. 63X oil immersion lens (use Zeiss 518F immersion oil)

4. After selecting the objective mount the specimen on the microscope stage and bring it in focus using the halogen light. Remember, this is an inverted microscope so be sure your coverslip is closest to the objective.

5. For the halogen light push the black halogen button located on the right hand side of the microscope to turn it ON - usually the light is on. To adjust halogen light, use the button below the camera on the front.

6. Use the lowest black button located on the left hand side of the microscope to switch between binocular and the front port where the camera is attached. Select binocular.

7. Looking through the binoculars bring the specimen into focus and set up Köhler illumination.

8. Launch AxioVision Release 4.8 software on the computer. Use the lower black button on the left to switch to the camera (front port).

9. Click Live in the software to observe your specimen. If the screen remains black you need more light: adjust the halogen light with the button below the camera.

10. Click on the “Properties” tab to adjust imaging conditions.

11. Under the Acquisition tab adjust white balance using the “Interactive” tab. On the right screen click on the specimen where there is no cells/tissue to select background. This maneuver updates your histogram.

12. Adjust other parameter as necessary. In the “Frame” tab you can select region of interest (ROI) and image resolution: choose the highest 2584x1936 pixels.

13. Click “Snap” to take the image. Choose file extension and folder to save your picture. Save all your data to USB memory or external drive. The facility is not responsible for storing images.

14. Once you are done acquiring images exit the software, log off and take your specimen out of the specimen holder.

15. Clean the objective lens using the provided lens cleaning paper and the Zeiss cleaning solution.

16. Clean up the workspace and cover the microscope before you leave.