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Fluorescence microscope (Zeiss)

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Behavioural Genomics



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How to operate the fluorescence microscope in the lab. Beware of safety hazards: This instrument uses led radiation. Do not stare at the operating lamp for a prolonged period of time in fluorescence mode.

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protocol ,

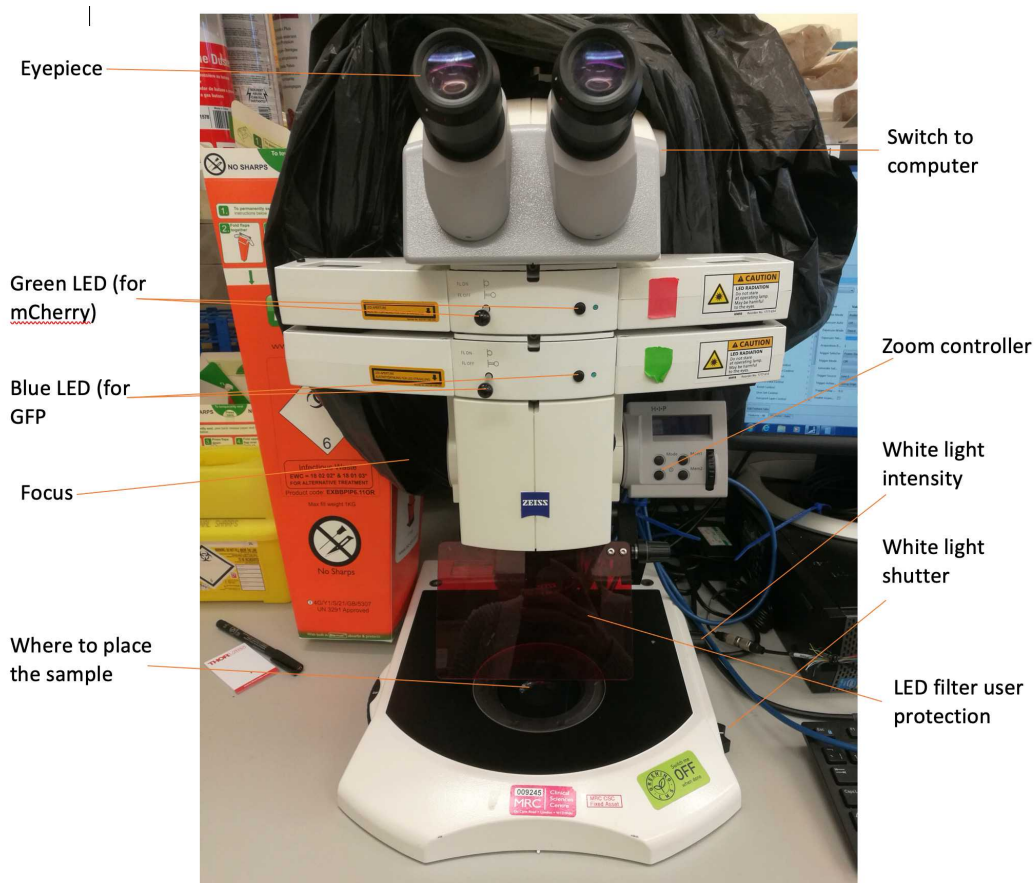
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Microscope layout

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Schematics of microscope


Operating microscope

- 2 Turn on the white light intensity and shutter
- 3 Turn on the zoom controller
- 4 Turn on the LED, if using fluorescent mode
- 5 Turn on the software on the computer: Pylon viewer

- 6 Place sample in the microscope and adjust the eyepiece
- 7 Focus the sample using the wheel on the left-hand side whilst observing through the eyepiece
- 8 Using the white light shutter on the right to block out the white light, only fluorescence from the sample reaches the eyepiece.
- 9 To capture an image, switch to computer mode using the switch on the upper right-hand side.
- 10 Press the camera symbol in the software to capture an image. Parameters such as acquisition time can be set in the software.
- 11 The best results are obtained when the plastic cover is on and the background light in the room is kept at a minimum.
- 12 Turn off the white light, LED, and zoom controller when finished using the microscope.
- 13 Enclose with plastic cover.

Trouble-shooting

- 14 The software does not connect to the camera:
Make sure the USB cable is plugged in to a USB 3.0 port on the computer. Check that the camera is on. Make sure the correct driver is installed.
- 15 The zoom controller, white light or LED don't turn on:
Make sure that the microscope is plugged in.
- 16 Nothing can be seen through the eyepiece:



Make sure nothing is blocking the path between the sample and the objective lens. Make sure that the microscope is not switched to camera view.