Light Microscopy Training Policy
Leica DM6B upright microscope

The training typically takes 1.5 hours and covers the use of the microscope and digital imaging with a color and a monochrome camera. For most fluorescence microscopy needs, the monochrome sCMOS camera will be a much better choice.

Instrument management, reservations and billing is done via the iLab software and therefore all users need to be registered in iLab. Detailed instructions for the user and the Principal Investigator/Advisor are provided after the training request is initiated.

The room is not approved for BSL-2 samples. If you will be imaging samples with Biosafety Level 1 (BSL-1) classification, the Principal Investigator must:

1. Amend his/her BSL-1 IBC applications to include Room 1120 ILSB (Building 1530) and include the list of agents and description of procedures that will be performed within the room. For more information, please see the Research Compliance & Biosafety website https://rcb.tamu.edu/. To submit/amend an IBC application, please login to the iRIS Portal https://iris.tamu.edu/.
2. Upon approval, provide a copy of the IBC outcome letter to the MIC. Also provide the list of agents and description of procedures that will be performed in the room. This information must be added to the room documentation.
3. Provide updated info for our records on any future amendments, such as adding a new agent or changing/adding a new procedure.

Users are given Facility-specific safety instructions.
Depending on the nature of the samples and user needs, the microscopy training may include:

- **Transmitted light imaging:** Bright Field; Phase Contrast; Differential Interference Contrast; Polarized Light Microscopy
- **Reflected Light/Epi-illumination imaging:** Fluorescence
- **Microscope control:** Focusing; front panel operations; using dry and oil immersion objectives; cleaning oil objectives after use
- **Software functions:** Camera white balance, binning, gain and exposure time, Flat Field correction, multi-channel imaging, z-stack acquisition, time-lapse imaging; Image stitching.

After the basic training is completed, you may use the microscope independently during normal business hours. Once you gain proficiency in using the instrument, you will undergo a practical check-out test to demonstrate that you can operate the microscope without endangering yourself or the microscope. After successful checkout, you will get access to the online scheduling system and get building and lab access using your university ID card.