Imaging Core: BRI

Location: BloodCenter of Wisconsin Blood Research Institute

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Learn more about the BloodCenter of Wisconsin's Imaging Core

Overview

The Imaging Core at BloodCenter’s Blood Research Institute (BRI) provides services in microscopy and analysis of two-dimensional images. Staff assists investigators and technologists through training for the use of microscopes and software packages that digitize images.

- **Zeiss Lumar .V12, Dissecting scope**
  The Lumar is used for specimen dissection and analysis. It uses a 1.6X or 0.8X objective allowing for high resolution of specimens and great working distance. Fluorescence filter sets allow for the excitation of GFP, CFP and Rhodamine stained samples. Images can be acquired using a 5 megapixel Zeiss AxioCam MRc 5 camera. Perform further image analysis using Zeiss AxioVision 4.5 software.

- **NikonTE200, Inverted**
  Used for live cell cultures and prepared mounted slides. This microscope is outfitted with PLAN Fluor objectives 2X, 4X, 10X, 20X, 40X, and 60X. Fluorescence images can be acquired using filter sets for Hoechst, DAPI, FITC, Texas Red, and Cy5. Images can be taken with a Photometrics CoolSNAP ES2 camera using Nikon NIS Elements software.

- **Nikon E600, Upright**
  Used for analysis of prepared mounted slides. This microscope is outfitted with Plan Fluor objectives ranging from 4X -100X. Images can be acquired using a Diagnostic Instruments Spot insight color camera using Spot Advanced software.

- **Zeiss Axio Scope, Upright**
  Used for analysis of prepared mounted slides. This microscope uses high resolution Plan Neofluar optics ranging from 10X -100X. Fluorescence images can be acquired with filters sets exciting for DAPI, FITC, and Texas Red.

**Nikon Ti-2** E is an inverted, high speed, motorized microscope for advanced imaging. Used for imaging through glass. Its major uses are for experiments using multidimensional imaging that combine multi-channel, multi-XY positions, Z-stacking, image stitching, and time-lapse imaging. Currently on the system the objectives are: 10x, 20x, 40x, 60x oil, and 100x oil and the filter blocks are: DAPI, GFP, Mcherry, TRITC and Cy5. It is equipped with a unique Perfect Focus System that helps users find their sample and automatically corrects focus drift in real time during a prolonged period of time-lapse imaging. Deconvolution is available in the software for noise measurement and removal. DIC components on the microscope enhance bright field imaging as well. It has a monochrome camera for fluorescence imaging and a color camera for real color imaging. Instruments are reserved on a first come, first served basis. All
users are provided with training by our core technologist. Any usage should be scheduled at least 48 hours prior to the time needed.

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<th>Equipment/Software</th>
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**Hours**: as needed - please contact us

**Common users of the facility**: Vascular Pathobiology; vWf Biology; Platelet Molecular Biology; TFPI Biology

**Rate**: there are no charges