AVAILABLE MICROSCOPES

- Zeiss LSM 510 META  WMB 303
- Zeiss Axioskop with Axiocam Camera  WMB 303
- Zeiss Axioskop with RT Slider Spot Camera  WMB 303
- Olympus IX71 Microscope with DP71 Camera  WMB 303
- Leica TCS SP5  WMB 1011

1. Personnel:

   Director: Lu Hilenski, Ph.D.
   Assistant Professor of Medicine
   Department of Medicine/Division of Cardiology
   Emory University School of Medicine
   Room 329 Woodruff Memorial Research Building
   101 Woodruff Circle
   Atlanta, GA  30322
   Telephone: 404-727-8116
   FAX: 404-727-3330
   e-mail: lhilens@emory.edu

2. Mission Statement:

   The Microscopy in Medicine (MiM) Core was established in 2000 as a core facility providing access to state-of-the-art imaging instrumentation and technologies on a shared-use basis to faculty, staff and students of the Division of Cardiology and Department of Medicine in the Emory University School of Medicine. The goals of the facility are as follows:

   - To train users on proper operation and care of the fluorescence and laser scanning confocal microscope (LSCM) systems (including laser safety) located in the facility
   - To provide technical advice and consultation on specimen preparation, immunofluorescence and image analysis techniques
   - To maintain and coordinate the scheduling calendar in the shared-use facility
   - To ensure the upkeep and maintenance of the microscopes
   - To serve as a resource for innovations in the field of microscopy and image analysis

3. Becoming a Certified User:

   a. All potential users of the fluorescence systems—the two Zeiss Axioskops and the Olympus IX71 in Room WMB 303—and the LSCM (Zeiss LSM 510 META in Room 303) and Leica TCS SP5 (WMB 1011) systems are asked to contact the director of the facility,

      Dr. Lu Hilenski
      WMB 329 (Office); WMB 303 (Lab)
      404-727-8116
      FAX: 404-727-3330
      lhilens@emory.edu
to schedule a one-on-one Basic Training session at a mutually convenient time.

b. Due to the expense and complexity of the fluorescence and Zeiss and Leica confocal systems, it is IMPERATIVE that all users attend this training session before operating the instruments.

c. Certified users agree to follow all of the guidelines and policies established by the Internal Advisory Committee of the MiM Core as set forth in this document.

d. It is advisable to wait to schedule training time until you have worked out an effective staining protocol for your experiments. The single most critical parameter in determining the quality of the image is the quality of the specimen preparation.

4. Training:

a. All users must be trained in a one-on-one session by Lu Hilenski. These individual training sessions include proper use and care of microscope objectives, operation of the microscope and laser system, laser safety, how to acquire, save, export and transfer images.

b. The average training time is approximately 3-6 hrs, and is related to the user’s experience with microscopes and PC computers.

c. Users will NOT train other users under any circumstance.

d. Nobody may use any equipment unassisted (before 8:00 AM, after 7:00 PM, weekends) without first being checked out by Lu Hilenski, Director of the MiM Core. After hours access is given at the discretion of the director and may be cancelled for any user who does not adhere to the policies of the MiM Core.

There are no exceptions to these rules.

e. Refresher training is required for anyone who has not used the MiM Core equipment for 6 months.

5. Guidelines for Viewing Specimens:

Users are encouraged to consult with the director BEFORE planning an experiment to ensure proper sample preparation and use of fluorochromes compatible with the laser lines and filters available on the microscopes. Samples mounted with sealing agents (e.g., fingernail polish, anti-fade mounting agents), must be COMPLETELY DRY before using the microscopes.

6. Sign-Up:

a. By prior agreement, the Renal Division has the following times on the Zeiss LSM 510 META blocked for their use (these blocked times do not apply to the other microscopes in WMB 303, nor to the Leica confocal--only to the Zeiss confocal):

   Renal Monday 12-4
   Wednesday 3-7
   Friday 9-12
Microscopy in Medicine (MiM) Core: Microscope Policies
http://medicine.emory.edu/MIMCore

If the Renal Division is not using its allotted times, then anyone else can sign up.

b. All other times are on a first-come, first-served basis.

c. No one user may book more than **3 hours in any one day** (8:00 AM to 7:00 PM) without first obtaining permission from Lu Hilenski.

d. Sign up times are strict. If another user is scheduled after your appointment, you are expected to vacate the equipment promptly at the end of your scheduled time.

e. Users who, without giving notice (by e-mail hilens@emory.edu or voice mail 404-727-8116 to Lu Hilenski) are more than 1/2 hour late for a sign-up time may have their time forfeited and will have to reschedule.

f. If a user signs up for a time slot and does not show up on two separate occasions, the PI of the user will be notified. These users may be banned from use of the equipment for a two week period.

g. Sign-up slots may be cancelled at any time to schedule needed maintenance or repairs.

h. If a cancelled appointment is the last one of the day, it is the client's responsibility to make certain that the instrument is shut down properly. Voice mail messages to Lu Hilenski are not acceptable.

7. Use:

a. Data may be stored on the hard drive on the computer no more than 3 days (including weekends). After 3 days the data may be deleted without notification. **Users are responsible for backing up their own data at the end of each session.**

b. Users may not invite an untrained user to accompany them into the MiM Core except under special circumstances that must be cleared in advance by Lu Hilenski.

c. General use of workstations in WMB 303 and WMB 1011 is summarized as below:

   **No installing software onto the computer. No surfing the internet. No personal e-mail.**

8. Citations:

a. We respectfully request that you acknowledge the MiM Core in any publications resulting from use of our microscopes.

   “*Experiments/data analysis/presentation [include what you use] were performed in part through the use of the Microscopy in Medicine Core, (supported by NIH grant PO1 HL095070).”*

b. For our records, we would also like to be notified of published manuscripts which include images taken in the MiM Core.

   **These rules are subject to change at any time by Lu Hilenski**