



Microscopy in Medicine (MiM) Core: Microscope Policies

<http://medicine.emory.edu/MIMCore>



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Available Microscopes:

- Zeiss LSM 800 Airyscan Laser scanning Confocal microscope (WMB 303)
- Zeiss Axioskop 2 with Axiocam Camera (WMB 303)
- Zeiss Axioskop 2 with RT Slider Spot Camera (WMB 303)
- Olympus IX71 Microscope with DP71 Camera (WMB 303)
- Leica TCS SP5 Confocal Microscope with tandem Scanner (WMB 2012)
- Hamamatsu NanoZoomer SQ Whole Slide Scanner for Brightfield (WMB 303)
- Keyence All-in-one Fluorescence System (WMB 303)

1. Personnel:

Director:

Alejandra Valdivia, Ph.D.

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2. Mission Statement:

The Microscopy in Medicine (MiM) Core was established in the year 2000 by Dr. Lu Hilenski, 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.

The goals of the facility are as follows:

- To train users on proper operation and care of the fluorescence and laser scanning confocal microscope systems and other imaging systems located in the facility
- To provide technical advice and consultation on specimen preparation, immunofluorescence and image analysis techniques
- To establish scientific collaborations with researchers to generate quality data for grant applications or publications
- To provide scientific advice regarding ongoing research projects or new grant proposals
- 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. Training:

- a) All users **MUST** attend a training session before operating the instruments.
- b) All potential users of the imaging systems are asked to contact the director of the facility, to schedule a one-on-one Basic Training session at a mutually convenient time.
- 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) Users must complete the General Laser Safety module through EHSO (<http://www.ehso.emory.edu/training/index.html>)
- e) Users will **NOT** train other users under any circumstance.
- f) After training, users are authorized to work Monday-Friday 9:00 AM-5:00 PM. **After-hours access (before 9:00 AM-after 5:00 PM and weekends) is given at the discretion of Dr. Valdivia to users that have enough experience and confidence to work independently.** This benefit may be cancelled for any user who does not adhere to the policies of the MiM Core.
- g) Computer passwords are personal and **MUST NOT** be shared with other users.
- h) Refresher training is required for anyone who has not used the MiM Core equipment for 6 months.

THERE ARE NOT EXCEPTION TO THESE RULES

4. Guidelines for Viewing Specimens:

- a) 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.
- b) Samples mounted with sealing agents (e.g., fingernail polish, anti-fade mounting agents), must be **COMPLETELY DRY** before using the microscopes.

5. Sign-Up:

- a) All schedule times are on a first-come, first-served basis.
- b) 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 Dr. Valdivia.
- c) Sign up times are strict. If another user is scheduled after your appointment, you are expected to vacate the equipment and clean promptly by the end of your scheduled time.
- d) Due to the high demand, we encourage to give a cancellation notice 16h in advance. Recurrent last minute cancellations would be evaluated in a case-by-case basis by Dr. Valdivia.
- e) Same day cancellation should be notified by e-mail (avaldiv@emory.edu) or voice mail 404-727-8116 to Alejandra Valdivia.
- f) Users who, without giving notice are more than 30 min late for a sign-up time may have their time forfeited and will have to reschedule.
- g) 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 if this happens often.
- h) Sign-up slots may be cancelled at any time to schedule needed maintenance or repairs.
- i) **If a cancelled appointment is the last one of the day, it is the user's responsibility to make certain that the instrument is shut down properly.** This is particularly important before weekends or holidays. If the microscope is not shut down properly, the user's PI will be notified and be responsible for all the hours the microscope was left on. After hours voice mail messages or emails to Dr. Valdivia are not acceptable.
- j) Users need to log the usage in the clipboard next to each microscope.

6. General Use:

- a) User must properly clean after the use of imaging device. Abandoned samples will be disposed without previous notice.
- b) The use of broken coverslips in the microscopes or scanners is prohibited due to the potential user harm and/or equipment damage.
- c) Users MUST contact immediately Dr. Valdivia if something does not seem to be working properly or if maintenance is required.
- d) **Users are NOT allowed to perform any maintenance related action or repair under any circumstances.** These include but are not limited to: replace broken lamps, remove objectives for cleaning, remove motorized stages, etc.
- e) Data may be stored in the computer (D: drive) no more than 3 days. Data stored in a different drive or stored for more than 3 days will be deleted without notification. Users are responsible for backing up their own data at the end of each session.
- f) 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 Alejandra Valdivia.
- g) General use of workstations in WMB 303 and WMB 2012 is summarized as below:
No installing software onto the computer. No surfing the internet. No personal e-mail. No personal pendrive/external disks.

7. Implementation of MiM Policies and Guidelines

Any violation to the MiM Core Policies will be formally reported to the respective principal investigator. After multiple violations and/or significant damage of the equipment, users may be banned for using any imaging device in the facility as determined by the Internal Advisory Committee of the MiM Core.

8. Publications and Citations:

Our funding depends upon your citing the Microscopy in Medicine (MiM) Core and reporting of publications.

- We respectfully request that you acknowledge the MiM Core in any publications resulting from use of our microscopes as follows:
“Experiments/data analysis/presentation [*include what you use*] were performed in part through the use of the Microscopy in Medicine (MiM) Core, (supported by NIH grant PO1 HL095070).”
- Data generated for publications as part of a formal scientific collaboration would require authorship accordingly.
- For our records and for scientific diffusion purposes, we would also like to be notified of any published manuscripts, Journal Covers, Press Release or imaging contest prizes which include images taken in the MiM Core. Please report publications by email to avaldiv@emory.edu.

***These rules are subject to change at any time by Dr. Alejandra Valdivia or the Division of Cardiology**