IDM Microscopy Platform User Policy and Memorandum of Understanding

Version: 1.3- January 2025

Acknowledgements: This user policy and MOU was development with reference to policies and recommendations of the Royal Microscopy Society, Global Biolmaging, and the Optical Imaging Centre in Erlangen, Germany.

The IDM Imaging Platform (IDM- μ) is an open access imaging and analysis platform, accessible to all researchers within the Institute for Infectious Disease and Molecular Medicine (IDM) and faculty of Health Sciences at the University of Cape Town, as well as those from outside the local campus. Microscopes are distributed throughout the IDM.

While platform staff provide training and support, the IDM-µ is not a service-based facility. It is a core technology platform, enabling research and collaborations between expert staff/ scientists, and user scientists. Access to equipment for use is based on agreement to pay an hourly user fee, as per the attached fee policy, as well as agreement to the below terms. Access to AMI Imaging Centre microscopes through the AMI-IDM-µ program is based on the same terms here, as well as those included in the associated AMI-IDM-µ Program policy document.

System access and training:

- 1. All new users of the IDM-μ must engage in a consultation about their planned imaging project and needs. IDM-μ staff will assist with project planning where needed, help to identify the most appropriate microscopes to use for the project, and identify training needs of the user.
- All users must be fully trained on the relevant microscope/s they would use for a project before they are allowed access and booking rights for the microscope/s. Access and booking rights are dependent on proven competency in the independent use of each microscope.
- 3. Users must comply with all health and safety requirements for every microscope to be used and the lab it is housed in, including safety training, SOP and Risk assessment provision, as required, before they are allowed access and booking rights for the microscope. Where additional training process are required (i.e. for BSL3 lab access), this process is in addition to and separate from the training provided by IDM-µ.
- 4. For health and safety reasons, sample preparation must not be carried out in any microscope rooms or labs without IDM-μ staff permission and provision of the relevant health and safety documentation. Similarly, no samples will be stored overnight or longer in any microscope rooms or labs without IDM-μ staff permission and provision of the relevant health and safety documentation.
- 5. Training is provided by IDM-μ staff at the rates provided in the attached fee structure. The first 3 hours are included in a package Pilot Assay fee, if applicable. Thereafter or otherwise, training is billed on an hourly basis. The length of training is dependent on the system being trained on, a user's previous imaging experience and imaging needs. Typical microscope user training takes 3 5 hours.



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- 6. Key objectives of the microscope training are to equip the researcher to understand the microscope and the implications of various configurations and parameters on their experiment, and to operate the system safely and independently. Additional training and supported imaging may be available on request, pending IDM-μ staff availability, and at the fee indicated in the attached fee structure.
- 7. IDM staff are typically available for support during regular working hours. For health and safety reasons, newly trained microscope users are limited to daytime microscope and imaging lab access only. More advanced users can request access to afterhours microscope booking from IDM-µ staff.
- 8. All microscope bookings must be made through the booking system, Clustermarket. Following completion of user training, users will be granted access to the microscope booking portal.
- 9. Billing for microscope use will be based on Clustermarket bookings, rounded to the nearest 30min increment, with a minimum usage period of 60 minutes. It is each user's responsibility to ensure the bookings are an accurate reflection of microscope use.
- 10. No use of any of the of the IDM-μ microscopes is permissible without first making a booking. If a user is found to use any IDM-μ microscopes without, or outside of the period of, a booking, 200% rates will be charged for the un-booked usage. In the case of a user's repeated microscope use without proper booking, microscope access may be revoked on a temporary or permanent basis.
- 11. Users are required to update the IDM-μ on the projects they use the microscopes for, i.e. if initially consulted projects are ongoing, have significantly changed in scope or direction, or if new projects are being brought onto the microscopes. This is critical for reporting purposes for the IDM-μ and its funding sources. Ad hoc project updates are welcome and encouraged. Otherwise updates will be requested from all users every 6-9 months.

Equipment contribution:

- 12. Researchers and their group members who contribute equipment to the platform do not have to pay for the usage of their own devices while the device is under the original service plan. They are, however, encouraged to contribute 45% of the user fees. These funds will be reserved specifically for maintenance and servicing of the equipment outside of and after the expiration of the service plan/ warranty.
- 13. Following expiration of the service plan, group members of researchers who contributed the equipment will have to pay 70% of user fees for that device. These funds will be used for the support and maintenance of that equipment.
- 14. Users of a piece of equipment they or their group have not contributed to the platform, will pay the full usage fee.

Fair use and cancellations:

- 15. Fair-use booking is encouraged to ensure ease of access by all users. Fair-use guidelines may vary based on the demands on a given system, users' needs, and the imaging technology.
- 16. In the absence of explicit system-dependent guidelines, users are limited to bookings of 5 hours in a given day and 15 hours per week in total. Use exceeding these limits



- must be constrained to after-hours use (17:00 08:00), pending agreement from IDM- μ staff regarding afterhours access.
- 17. Researchers and their lab members who contribute equipment to the platform will be limited to 5 hours in a given day and 18 hours per week in total. Use exceeding these limits must be constrained to after-hours use (17:00 08:00),), pending agreement from IDM-μ staff regarding afterhours access.
- 18. Users planning live-sample imaging requiring microscope heating and incubation should plan for microscope heating time in their system booking. Microscope cooldown time and other users should be taken into consideration when planning when to turn off microscope heating.
- 19. Booking practices deviating from the fair-use guidelines without prior, written consent from IDM-µ staff will result in temporary loss of access to the microscopes by the relevant users.
- 20. All changes to booking guidelines will be communicated with users by email and through Clustermarket.
- 21. All users are expected to adhere to their microscope bookings. This includes stopping use on the system at the end of a booking session. If a booked session will not be needed, it can be cancelled up until 30 min prior to the booking. Please communicate last minute microscope booking cancellations (90 minutes or less before a booking is scheduled to start) directly to IDM-µ staff by email.
- 22. Sessions can be updated before the end of a session, to reflect usage shorter than the original booking. Unused bookings on busy systems can also be transferred to other users, with agreement of IDM-µ staff.
- 23. Unused, un-cancelled bookings will be charged at the full rate.

Equipment care and breakage:

- 24. The IDM-μ is responsible for routine maintenance, coordinating services and repairs, and appropriate quality control for all microscope systems.
- 25. Users are expected to use and clean the system with care, to the standard they are shown during training.
- 26. Systems must be appropriately cleaned and imaging stations left in a tidy state at the end of every imaging session.
- 27. Every user is obligated to test the booked equipment for its proper function at the start of their session. If improper function is found during this initial check-up, the user immediately has to submit an incident report or advise a member of IDM-μ staff about the issue in person. Likewise any problems with microscope system operation during an imaging session must be reported to the IDM-μ immediately, via an incident report or in person. IDM-mu staff will help to resolve any issues themselves, or coordinate expert support/ repairs where needed.
- 28. Costs for system or component breakage as a result of unreasonable or improper system use, and /or actions in contradiction to instructions given in training, (i.e. not from normal wear and tear of parts at the end of their respective average life time) will be the responsibility of the group leader/ P.I. of the responsible user. If damage to a system or component is identified without an incident report having been made, the previous logged user will be held responsible. Where costs are beyond the budget of the group, the IDM-μ can collaborate with the group in preparing funding grant applications for component repair, replacement or servicing.



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29. User fees collected will contribute to system maintenance and repair outside of service contracts, among other platform running costs. Where maintenance/repair from reasonable use and wear is beyond the IDM-µ's reasonable ability to pay for it, IDM-µ staff will collaborate with researchers for funding grant applications for component repair, replacement or servicing, or other system upgrades.

Data storage and handling

- 30. Users are required to transfer acquired microscopy data to their own storage servers or other storage systems at the end of each imaging session, or when not practical, within 24 hours of acquisition.
- 31. All data transfer is required to be carried out via networked servers, cloud services or other online or networked means. Absolutely no use of external USB devices or CDs is permitted on any IDM-μ PCs. Any exceptions to this will require the express written consent of IDM-μ management, at their discretion. Failure to adhere to this will result in loss of independent access to the microscope all microscope use by relevant parties will have to be supervised by IDM-μ staff, at the relevant fee, and subject to their discretion and availability.
- 32. Data stored on the acquisition PC of each microscope are retained for two months after the acquisition date. Data stored on the Analysis Workstation are only retained for one month. Following these periods, data will be deleted. Users will be informed by email 1 week prior to deletion of data. The IDM-µ does not take responsibility for backing up any users' data.
- 33. The IDM-µ tries to maximise the safety of users' data by monitoring disks and servers (where applicable), however, is not responsible for loss of data.
- 34. Microscope acquisition settings or profiles stored in an appropriate folder (with the name of user) will not be deleted while users remain intermittent or regular users of the given microscope. Following 12 months inactivity on a given microscope, any settings or profiles will be remotely backed up and deleted from the acquisition PC by IDM-µ staff, unless a prior arrangement is made with the IDM-µ.
- 35. Data stored anywhere other than the designated data and settings directories on any PC (especially on the Desktop) will be deleted after 1 week without notice.

Acknowledgements and authorships:

- 36. The IDM-μ and its staff (academic, student assistants, and PASS) are funded from several sources, including grants. To be able to demonstrate and report on the value of the IDM-μ and secure ongoing funding, acknowledgment of the platform's contribution to research outputs is critical. An acknowledgement is mandatory for all publications featuring images or data resulting from use of IDM-μ microscopes or analysis systems and/or support from IDM-μ staff (including experiment planning support, and advice on sample preparation, or analysis strategies). An example phrase that can be adapted as appropriate is: *Microscopy/Image analysis was performed with the support of the IDM Microscopy Platform at University of Cape Town Faculty of Health Sciences (RRID:SCR 022309), and NAME(S) of MEMBER(S) of STAFF.*
- 37. Where AMI Imaging Centre microscopes are used through the AMI-IDM-μ program, the following acknowledgement text should be adapted as appropriate: *Microscopy/Image analysis was performed with the support of the Africa Microscopy*



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- Initiative Imaging Centre (RRID:SCR_025881) and the IDM Microscopy Platform at University of Cape Town Faculty of Health Sciences (RRID:SCR_022309), and NAME(S) of MEMBER(S) of STAFF.
- 38. Similar acknowledgements on other outputs such as dissertations, theses and conference posters are strongly encouraged.
- 39. IDM-µ and AMI Imaging Centre access and support are not fully costed through fees, and we therefore operate on the basis of collaborations, especially for any contribution beyond basic training. Engagement of IDM-µ staff in formal scientific collaborations is encouraged. Where staff are part of a project beyond initial training and advice, a collaboration agreement should be discussed. This can be negotiated to include grant budgeting for fees and services and/or an appropriate % FTE for a platform staff member to support the project, as well as agreements around publication coauthorship.
- 40. Scientific input and expertise beyond basic training input, regarding, for example, experimental set-up, data acquisition or analysis from any IDM-μ staff, should be recognised through co-authorship on resulting publications, as per UCT's Authorship Practices Policy and in alignment with the EU-funded Embassy of Good Science authorship criteria.
- 41. Please see table 1 for examples of scenarios where simple facility and staff acknowledgement, or the inclusion of specific facility staff member/s among co-authors may be expected, along with an acknowledgement of the facility.
- 42. All facility and staff acknowledgements and staff co-authorship allocations must be discussed with the relevant facility staff prior to submission of a manuscript.
- 43. Failure to appropriately acknowledge the IDM-μ and staff in publications will result in 3-6 months' loss of access to IDM-μ facilities by the relevant PI and group members, as deemed appropriate by IDM-μ management and the IDM-μ advisory board.
- 44. All research outputs that, is research publications, grant applications, dissertations, theses, and similar, resulting from use of IDM-μ equipment, support, or input, must be reported in writing to IDM-μ management as soon as possible. All publication details must be shared in writing with the IDM-mu staff and management once the publication is publicly accessible, including on pre-print servers such as BioRxiv. This is critical for the platform's reporting and impact assessments to funders and faculty.

Table 1: Example scenarios and baseline recognition recommendations:

	Example scenario	Acknowledgment required	Inclusion of relevant staff member(s) on authors list required
Sample preparation	Advice and/or training for fast, routine sample preparation with a standard protocol	✓	
	Development or optimisation of new sample preparation protocols. Optimisation of existing protocols for specific samples or assay.	V	V
lma ge acq uisiti	Training users to determine appropriate acquisition parameters and acquire images themselves.	V	



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	Image acquisition with input and parameter decisions based on staff members' expertise. Imaging assay development, or (re)-design of experimental conditions or hardware decisions	V	V
Image analysis	Recommendation of analysis software and tools. Basic data analysis help and advice		
	In depth data analysis advise or execution, and data interpretation. The creation of custom image analysis tools including those for automation of processes.	V	V

Memorandum of Understanding:

The below signatories enter into this memorandum of understanding, agreeing to all the above listed terms in this policy and committing to abide by them.

Microscope User:

Name:	Signature:
Staff/ student number:	Date:
<u>Lab Head/ Supervisor:</u>	
Name:	Signature:
Date:	
IDM Microscopy Platform Management:	
Name:	Signature:
Date:	

