

EXPERIENCE USER TRAINING AND EVALUATION FORM (Cryo-FIB)

Prof/Dr/Mr./Mrs./Ms.* _____ Position: ☐ MPhil student/ ☐ PhD student / ☐ Staff / ☐ Faculty member	
Student / Staff Number: _____	
Training date: ____ / ____ / ____	Evaluation Date: ____ / ____ / ____ By: _____

Evaluation Items		Trained	Pass/Fail
Part A (General Policy and Safety)			
General Policy	Cryo-FIB SEM users are required to book a minimum of 4 hours	☐	
	FIB SEM users must book a minimum of 2 hours.	☐	
	To ensure availability of extra liquid nitrogen, please contact CPOS staff at least 3 days prior to your experiment to determine the booking duration.	☐	
	Exceeding the scheduled session will result in extra charges, calculated on an hourly basis	☐	
	Experience users can book the weekend session.	☐	
	If you have already booked the first day session, you want to book the next day consecutively. You can add the note in iLab event notes. CryoEM staff will help you to book the session for you for the following day.	☐	
Door Access	(Mon-Thu) Door access is restricted to the person who made the equipment booking and the trained user who will accompany, from 17:30 to 23:59 .		
	(Fri-Sun) Door access is restricted to the person who made the equipment booking and the trained user who will accompany, from Friday 17:30 to Sunday 23:59 .		
	(Public Holidays) Door access is restricted to the person who made the equipment booking and the trained user who will accompany, from the day before holiday 17:30 to the day of holiday 23:59 .		
	Please add the name of trained user who will accompany in iLab event notes.	☐	
	Test the card access from 17:30 to 18:00 on Friday if you book weekend session.	☐	
	Enter the lab via the entrance next to subway.	☐	
General Safety	Cards with RFID technology (e.g. Octopus card) may interfere with the card detection on the card reader.	☐	
	It is not allowed to pass the student/staff card to non-experienced users to access the lab in non-office hours.	☐	
	No eating or drinking at computer area.	☐	
	Familiarize yourself with the fire escape route.	☐	
	Locate and be aware of the emergency contact information and the first aid box.	☐	

	Always prioritize human safety over your samples!	☐		
Ethane, Oxygen Sensor Alarm	Stop the experiment immediately.	☐		
	Beam off SEM and FIB.	☐		
	Wait until the alarm stops before re-entering the lab.	☐		
Fire Alarm	Stop the experiment immediately.	☐		
	Beam off SEM and FIB.	☐		
	Make sure door of LLG05E Sample Freezing Room is properly closed.	☐		
	Follow the designated fire escape route to safely exit the lab.	☐		
	Do not re-enter the lab until it has been declared safe to do so by the appropriate authorities.	☐		
	After returning to the lab, please help to close the EM doors.	☐		
Downgrade Policy	Misconduct may result in warning messages or the suspension of booking privileges.	☐		
	After completing experience user training, users should be able to handle advanced situations related to the instrument. In most cases, please do NOT directly contact staff members on their personal mobile phones. If you encounter any of the following issues, please take note: a. Door access problem: please check your card access at office hour on Friday. If you have not done so, we will be unable to open the door for you at the weekend. Consequently, you will not be able to enter the Cryo-EM lab. b. Technical problem related to operation: After completing this training, you should be able to resolve common technical problems. However, if you encounter any unexpected hardware problems / error messages, please contact us the following day with the specific details. We will consider waiving charges on a case-by-case basis. c. If you have any specific condition settings, please contact our staff in advance.	☐		
Part B (Operation)				
Cryo-FIB Operation	How to monitor system vacuum and temperature?	☐		
	Purge GIS and SEM chamber	☐		
	When and how to turn on and off Nitrogen bolt valve	☐		
	Loading and unloading sample	☐		
	Image Focus and Astigmatism	☐		
	Link to Z	☐		
	How to adjust eucentric height	☐		
	Manual Ion beam alignment	☐		
	Difference between "wake up" and "beam off"	☐		

	How to GIS	☐		
	How to sputter coating	☐		
	Manual rough milling	☐		
	Manual polishing	☐		
	How to pump chamber vacuum	☐		
	Re-fill LN2	☐		
	How to define your template of AutoTEM?	☐		
	How to correlate SEM image and CLEM image in Odemis?	☐		
	How to correlate SEM image and CLEM image in Maps?	☐		
	How to acquire CLEM overview image?	☐		
	How to acquire CLEM Z-stack image?	☐		
	How to use 3d Tool box?	☐		
After The Run	Check no error for vacuum and temperature.	☐		
	Sign the logbook.	☐		
	Transfer data	☐		
	Warm up temperature	☐		
	Put the transfer rod back to SEM airlock and open the valve of transfer rod	☐		
	Sleep Ion beam	☐		
	AG Shuttle needs to be closed	☐		
	turn off nitrogen bolt valve	☐		
	Remember to take away all your personal belongings.	☐		
	Make sure door of LLG05E Sample Freezing Room is properly closed.	☐		
Evaluation Items		Trained	Pass/Fail	

Remarks for staff:

If the user can be processed for experience user training if:

- book and use the instrument 10 times within 10 months. (For Cryo-EM Core)
- has no misbehavior in the last 3 months (with at least 3 bookings).

Evaluation will be conducted after the training for 20 working days.

Fail the evaluation if:

- Fail any black item.
- Fail any 2 white items in either Part A or Part B.

If the user fails, he / she can apply again 3 months later.

Dear User,

This document is written to address the lab regulation & safety concerns when you are qualified to be an experienced user for any instruments within the LKS Cryo-EM Laboratory.

Please read through the Health and Safety section of the Operation Manual and be alerted in the lab area always.

When completed, sign the form below and return it to the LKS Cryo-EM Laboratory at LLG03 of Laboratory Block, Li Ka Shing Faculty of Medicine, HKU.

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- ☐ I confirm that I have been notified of any potential hazards and are reminded to be aware of all health and safety issues in LKS Cryo-EM Laboratory, in which the instrument of which I am an experienced user resides.
 - ☐ I am aware of all regulations and users' responsibility for LKS Cryo-EM Laboratory.
 - ☐ I am aware of the no tolerance policy of any abused use in non-office hours booking.

Name:

Staff / Student No.:

Department:

P.I. Name:

Signature: _____

Date: _____

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