



**NANYANG
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LEE KONG CHIAN SCHOOL OF
MEDICINE

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Title : **LABORATORY INCIDENT REPORTING AND EQUIPMENT FAULT
REPORTING FOR MICROSCOPES MAINTAINED BY NOBIC -
STANDARD OPERATING PROCEDURES**

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LABORATORY INCIDENT REPORTING AND EQUIPMENT FAULT REPORTING FOR MICROSCOPES MAINTAINED BY NOBIC - STANDARD OPERATING PROCEDURES

1. INTRODUCTION

1.1 OBJECTIVE

This Standard Operating Procedure (SOP) will provide information necessary for laboratory incident reporting and equipment fault reporting applicable to microscopes at LKCMedicine maintained by NOBIC. Additional information is provided to encompass additional processing when needed.

1.2 SCOPE

This Standard Operating Procedure (SOP) is applicable to all microscopes maintained by NOBIC at LKCMedicine, the list of which is in the Appendix, and covers safety and health issues that are specific to those microscopes.

1.3 RESPONSIBILITIES

Principal Investigator (PI) and Laboratory Manager (LM)

The PI and NOBIC LM are responsible for ensuring that all major and minor laboratory incidents and equipment fault are reported. The PI, via the LM, is ultimately responsible for ensuring that this SOP (and other applicable NTU-wide and nation-wide guidelines, SOPs and regulations) are adopted in the facilities or research laboratories where the microscopes are installed; ensuring that equipment users know where to obtain a copy of this SOP. The LM determines the necessary training needs, supervises and provides on-the-job training for all the research staff and students using the microscopes; and prepares specific SOPs when required for selected research protocols and equipment use.

Laboratory personnel

This SOP shall be practised by students, laboratory technologists, research assistants and research fellow upon receipt of training. Laboratory personnel shall be responsible for reporting all laboratory incidents and equipment fault. It is the responsibility of the users to follow the SOP as described and to inform the LM/PI about any deviations or problems that may occur while performing the procedure.

2. PROCEDURES

- 2.1 All accidents and injuries must be reported within 24 hours to your PI, the LKC Medicine Emergency Response Team (ERT), LKC Medicine Safety and Health Officer and to OHSE. The IIRF link for reporting could be found below: <https://ts.ntu.edu.sg/sites/intranet/dept/ohse/PublishingImages/Forms/DispForm.aspx?ID=22>
- 2.2 All incidents such as power trips, floods, leaks, which caused damage to equipment, should be reported within 1 hour of discovery. Major equipment breakdown resulting in immediate loss of samples or reagents, repair cost more than \$10k or research downtime more than 2 weeks (without redundancy) should also be reported as an incident in relation to major equipment breakdown. For such major cases, it should be reported to the audit risk committee under the risk register. In parallel NOBIC should be notified by filling the incident report form in PPMS booking system.
- 2.3 All equipment breakdowns with minimal repair cost (<\$10K) and research downtime less than 2 weeks will be categorized as minor equipment breakdown. For such minor cases, incident report form in PPMS booking system shall be used.
- 2.4 All incidents (excluding incident-involving injuries) and equipment breakdowns report should be made within 10 days from the event. This is to facilitate any insurance claim, whenever necessary.
- 2.5 The incident reporting forms is available on in softcopy in the research-shared drive: Y:\Research\Forms. Hard copy forms are also available at the research floors at both campuses. Form for reporting equipment breakdowns and/or any issues with microscopes is available in PPMS booking system.

3. SAFETY PRECAUTIONS

Personal protective equipment such as lab coat and gloves should be worn during retrieval of samples from of the equipment. The equipment should be disinfected prior to retrieval, assessment or repair work. All repairs must be performed by NOBIC or by service representative from the equipment's manufacturer and/or supplier.

4. REFERENCES:

- The University Safety Manual has several sections relevant to biosafety. Members of the LKCMedicine department are encouraged to access the safety manual on the OHS website:
<http://www.ntu.edu.sg/ohs/Pages/default.aspx>
- Good Laboratory Practice (GLP) Programme
<http://www.spring.gov.sg/qualitystandards/accreditation/pages/good-laboratory-practice.aspx>



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Incident Reporting Form

Please complete and submit the incident Reporting form to the office of Research Administration and Support Services (RASS).

Part I: Reporter's Particulars			
Name:		Designation:	
NRIC/ FIN/ Matriculation No:		Contact (HP & Email):	
Name of Supervisor/Principal Investigator:		Date and Time of incident:	
Location of incident:		Type of Incident:	
Part II: Briefly describe what happened & how it happened.			
PART III: Acknowledge			
Submitted by:			
Principal Investigator/Lab Manager		Signature	Date
Acknowledged by:			
Director of Research Administration and Support Services		Signature	Date
Incident reporting form version 1		Office of Research Administration and Support Services: Level 1, Headquarters Building, Novena Campus	



Please complete and submit the incident Reporting form to the office of Research Administration and Support Services (RASS).

Part I: Reporter's Particulars	
Name:	Designation:
Email Address:	Contact Number:
Name of Supervisor/Principal Investigator:	Date of incident:
Equipment Location:	Types of faults:
Part II: Briefly describe what happened & how it happened.	
PART III: Acknowledge	
Submitted by: _____ Principal Investigator/Lab Manager Signature Date	
Equipment Fault Reporting Form version 1 Office of Research Administration and Support Services: Level 1, Headquarters Building, Novena Campus	

Annex 3 – List of microscopes maintained by NOBIC

#	Microscope	Asset Nr.	Location
1	2-photon microscope - Nemo	5201039736	EMB 07-07-01
2	2-photon microscope - Stuart	5201039315	CSB 12-02P-01
3	2-photon microscope FVMPE-RS	5201001825-0	CSB 10-02N-01
4	High Content Screening Microscope - IN Cell 2200	5201001910-0	EMB 07-07-01
5	High Content Screening Microscope - Operetta CLS	5201002882-0	CSB 11-02T-01
6	Inverted Confocal Airyscan Microscope-LSM800	5201002085-0	EMB 07-07-01
7	Inverted Fluorescence Live Cell closed-box M.-CD7	5201002953-0	EMB 07-07-01
8	Inverted Fluorescence Live Cell Microscope - AO7	5201002952-0	CSB 11-02T-01
9	Inverted Live Cell Confocal Microscope-LSM800 Airy	5201002951-0	CSB 11-02T-01
10	Lightsheet Microscope	5201001728-0	EMB 04-02Y, Zebrafish facility
11	Lightsheet Microscope with Cleared Specimen Option	5201003097	CSB 11-02P-01
12	Slide scanner	5201002503-0	CSB 11-02T-01
13	Stereo Microscope Axio Zoom V16	5201002920-0	EMB 04-02Y, Zebrafish facility
14	TiE inverted fluorescence microscope	5201001736	EMB 03-02Y
15	Upright confocal - Animal Research Facility	5201001704-0	CSB 19-03C-01, ARF
16	Upright Confocal Microscope-LSM800	5201002084-0	EMB 04-02Y, Zebrafish facility
17	Upright fluorescence microscope - Axio Imager M2	5201002921	EMB 04-02Y, Zebrafish facility
18	Upright Fluorescence Microscope - DM5500	5201001542	EMB 03-02Y