WORKPLACE RISK ASSESSMENT SYSTEM
PRINT RISK ASSESSMENT

Print | Close

To export as PDF, Please follow the steps: 1. Right-click on the browser; 2. Select the print option and select LANDSCAPE layout; 3. Set the scale to 75% under more settings and save it as a PDF.

Risk Assessment Details ID: RA_SCELSE_119354 Rev No: 1 Draft ID: 0

User's School/ Department/ Student Activity Group:	Singapore Centre for Environmental Life Sciences Engineering	**Project Title:**	Working in Advanced Biofilm Imaging Facility
Workplace:	Singapore Centre for Environmental Life Sciences Engineering	**Other workplace:**	-
Location:	SBS-B2n-27P	**Conducted By:**	Foo Yong Hwee(YHFOO);Radek Machan(RADEK.MACHAN)
Approved By:	Peter Torok (PETER.TOROK@ntu.edu.sg)	**Submitted By/Submitted Date:**	Foo Yong Hwee/31-Oct-23
Approved Date:	31-Oct-23	**Next Review Date:**	30-Oct-26
Status:	Approved	**Comments:**	-

1. Hazard Identification					2. Risk Evaluation				3. Risk Control		
1a.	**1b.**	**1c.**	**1d.**	**1e.**	**2a.**	**2b.**	**2c.**	**2d.**	**3a.**	**3b.**	**3**
No.	**Work Activity**	**Hazard**	**Sub Hazard**	**Possible Accident/Ill Health & Person-at-Risk**	**Existing Risk Control**	**S**	**L**	**R**	**Additional Risk Control**	**S**	**I**
1	Transport of chemicals/biological agents/ media bottles across different laboratories to and from ABIF	Others:Biological/ Chemical	Others:Exposure to chemicals and/or biological agents spill	Others:Depending on the type of biological/chemical agent that may be present, user may suffer symptoms related to the agent.	-Designated carriers or trolley with secondary containment trays shall be used during the transportation. -BSL-2 attire and PPE (i.e. long pants, covered	3	1	3	NA		

					shoes, lab coat and nitrile gloves) shall be worn. -If a spill occurs, spills shall be contained and cleaned up using appropriate spill kits (chemical or biological spill kit) immediately				
2	Usage of epifluorescence microscope for imaging	Ergonomic	Others:Prolonged straining of eyes due to microscope usage	Others:Eye fatigue	-Take regular breaks between each sample processing.	1	1	1	NA
		Electrical	Contact with electrical energy	Electrocution	-Users must complete NTU OHSE eLearning - Basic Safety Training-Electrical Safety" via NTULearn or Workday@NTU. -When handling power socket, ensure that hands are dry.	4	1	4	NA
3	Usage of Confocal microscope for imaging	Physical	Non-ionisation radiation	Eye injury	-Users shall undergo laser operator check-up, obtain relevant N3 licence and undergo mandatory face to face training for usage of confocal microscope before access to the microscope is granted. -Users shall read and	2	1	2	NA

					understand ?Generic RA Use of Super Resolution ELYRA and CLSM780 Microscope?. -PPE to be worn shall include Lab coat, long pants, covered shoe and nitrile gloves and laser specific protective glasses.				
		Electrical	Contact with electrical energy	Electrocution	-Users must complete NTU OHSE eLearning - Basic Safety Training- Electrical Safety" via NTULearn or Workday@NTU. -When handling power socket, ensure that hands are dry.	4	1	4	NA
4	Maintenance of epifluorescence and confocal microscopes	Physical	Others:Contact with hot lamps	Burns/ scalds	-Only authorised users are allowed to change the lamps. -Remove power source and wait for 30minutes before changing the lamp.	1	2	2	NA
		Electrical	Contact with electrical energy	Electrocution	-Main power must be off before maintenance.	4	1	4	NA
5	Usage of scanning electron microscope	Physical	Others:Finger injury when opening and	Limbs injury	-Users are properly trained on how to open and close the chamber.	2	1	2	NA

			closing the chamber		-Keep fingers away from the edge of the chamber when opening or closing the chamber.				
		Electrical	Contact with electrical energy	Electrocution	-Users must complete NTU OHSE eLearning - Basic Safety Training- Electrical Safety" via NTULearn or Workday@NTU. -When handling power socket, ensure that hands are dry.	4	1	4	NA
6	Maintenance of scanning electron microscope	Physical	Others:Contact with hot filament	Burns/ scalds	-Only authorised users are allowed to change the filament. -Remove power source and wait for 30minutes before changing the filament.	1	2	2	NA
		Electrical	Contact with electrical energy	Electrocution	-Users must complete NTU OHSE eLearning - Basic Safety Training- Electrical Safety" via NTULearn or Workday@NTU. -When handling power socket, ensure that hands are dry.	4	1	4	NA
7	Disposal of samples	Others:Biological/ Chemical	Others:Exposure to chemicals	Others:Depending on the type of	-Glass slides shall be disposed into designated	3	1	3	NA

			and/or biological agents spill	biological/chemical agent that may be present, user may suffer symptoms related to the agent.	sharps bin. -Any gloves or containers in contact with biological materials must be disposed in the biohazard bin in the facility. -In the event of a puncture or cut, rinse the wound under running tap water, wash with soap and disinfect with 70% ethanol. Apply pressure with a gauze to stop bleeding and seek first aider assistance. Contact the SCELSE Safety Representative to report the incident and seek immediate medical attention. -BSL-2 attire and PPE (i.e. long pants, covered shoes, lab coat and nitrile gloves) shall be worn. -If a spill occurs, spills shall be contained and cleaned up using appropriate spill kits (chemical or biological spill kit) immediately.				