

## Safety Documentation

Please select the forms you require by selecting the check boxes below.  
You can select more than one.

**Method Statement**                       **Risk Assessment**                       **Chemicals COSHH**

Once you have made your selections, scroll down and complete the forms.

**Buttons:** [+ ] will add a row to a list    [- ] will delete a row from a list

You may save this file to a local drive at any time.  
When you have finished, save the file to a local drive and email it to your supervisor for authorisation.

**Supervisors** - There is a sign-off section at the end of the document set that must be completed.

**Staff may "self authorise", (as a supervisor), but the forms must still be submitted to the DSO for approval.**

### **IMPORTANT:**

YOU **MUST NOT** START ANY PRACTICAL WORK UNTIL THESE FORMS HAVE BEEN RETURNED TO YOU  
WITH **BOTH** YOUR SUPERVISOR'S AND DSO'S APPROVAL SIGNATURES ATTACHED.

### Please complete these fields

School or Service	Wolfson School of Mechanical, Electrical and Manufacturing Engineering
Department	CBE
Originator name	Jian Gao
email address	j.gao2@lboro.ac.uk
Location	CBE
Project / Activity / Task	Biomarker development and aging studies.
Supervisor Name	Alexandra Stolzing

### Risk Assessment

Reference

Location

Originator

Project / Activity / Task

Is this process risk assessment for a :  Laboratory / Workshop  General use  Event

Category 1: Machinery & work equipment:				
Design and Construction	Mechanical hazards	Electrical hazards	Radiation hazards	
N/A	N/A	Electrical test labels current	N/A	+
Category 2: Workplace				
Slips/Trips/Falls on the level				+
Category 3: Hazardous and/or Harmful substances				+
Liquid Nitrogen / Cryogenes				+
Category 4: Work activity				+
Lone working out of hours				+
Category 5: Work organisation				+
N/A				+

Explain the risks associated with these hazards				
People / Groups at risk	<input type="text" value="Operator and people in proximity"/>			+
Enter risk details here:-	Impact	Probability	Risk Score	
<input type="text" value="Slips/Trips/Falls on the level"/>	<input type="text" value="Slightly Harmful"/>	<input type="text" value="Highly Unlikely"/>		
What are the control measures?	Lowers Impact	Lowers Probability	+	
<input type="text" value="Reduce movement between the labs if possible. Ensure the lab organisation is good and remove any potential trip hazards from the floor Any spillages should be cleaned away in accordance with CBE SOPs"/>	<input type="text" value="Significantly"/>	<input type="text" value="Significantly"/>	+	
			Residual Risk	
			<input type="text" value="Low"/>	
People / Groups at risk	<input type="text" value="Operator and people in proximity"/>			+
Enter risk details here:-	Impact	Probability	Risk Score	
<input type="text" value="Aerosols/splashes from irritant substances &amp; sensitiser"/>	<input type="text" value="Slightly Harmful"/>	<input type="text" value="Highly Unlikely"/>		
What are the control measures?	Lowers Impact	Lowers Probability	+	

## Process Risk Assessment Form (Continued)

Wear appropriate PPEs, white lab coat, gloves and shoe covers, safety glasses if necessary.	Significantly	Significantly	x	
Work in BSC (any mains plug in equipment should be within current PAT date)	Significantly	Significantly	x	
			Residual Risk	
			Low	
People / Groups at risk	Operator and people in proximity			x
Enter risk details here:-	Impact	Probability	Risk Score	
Store and withdrawal from liquid nitrogen stores	Harmful	Likely	High	
What are the control measures?	Lowers Impact	Lowers Probability	+	
Must be trained in the safe handling of liquid nitrogen Wear appropriate PPE such as cryogenic gloves with no nitrile gloves inside, closed shoes, face shield.	Significantly	Significantly	x	
Keep the room ventilated and oxygen monitor in the room for alarming when oxygen level is low. Use the metal tray when retrieving samples from dewar in case leakage and dropping.	Significantly	Significantly	x	
			Residual Risk	
			Low	
People / Groups at risk	Operator only			x
Enter risk details here:-	Impact	Probability	Risk Score	
Lone Working out of hours	Slightly Harmful	Unlikely	Low	
What are the control measures?	Lowers Impact	Lowers Probability	+	
With reference to Risk Assessment SAF/MEME/7976 Attendee will be competent and have successfully completed lab induction. Loughborough University Lone working policy need to be followed, and must have permissions to lone work from supervisor and lab managers prior to work commencing. Will send OOH 1st contact a text message on entry to the lab and another when leaving. Depending on the length of OOH work needed, further text updates will be used (hourly/2 hourly). It is advised to use the lone working app and inform security so that they are aware of your location (lab number and building) on campus for the duration of your lone working/out of hours, and also inform Security when you leave the premises. Inform academic supervisor and a colleague of intention to lone work and state duration of stay. Ensure you have mobile phone on person at all times - security mobile number is 0800 526966 - security staff are also trained First Aiders.	Significantly	Significantly	x	
Will be aware of all safety procedures including for emergency evacuation.	Significantly	Significantly	x	
			Residual Risk	
			Low	
+ Add another Risk				

## Process Risk Assessment Form (Continued)

Personnel Group	Maximum (Task setup/ Re-configuration)	High (Performing the task)	Medium (Observing the task)	Low (Present, but not involved)	Lone Working (Out of hours)	No Exposure Permitted	Total
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Who may be at risk as a result of this activity?

Personnel Group	Maximum (Task setup/ Re-configuration)	High (Performing the task)	Medium (Observing the task)	Low (Present, but not involved)	Lone Working (Out of hours)	No Exposure Permitted	Total
Academic Staff	0	0	0	0	0	0	0
Technical Staff	0	0	0	1	0	0	1
Research Staff (PDRA)	1	0	0	0	0	0	1
Research Students (PhD)	0	1	0	0	1	0	2
Students (Undergraduate / MSc)	0	0	0	0	0	0	0
Visitors	0	0	0	0	0	0	0
Others - Over-type as needed	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>4</b>

With these controls in place, the risk is:

**The activity is LOW RISK - and is effectively controlled**

## Supervisor and Departmental Safety Office (DSO) Sign-off.

### Supervisors

Please check the documents above and if you want to approve them:

- 1) Electronically sign this document
- 2) Save it to a local drive (You will be prompted to do this)
- 3) eMail the signed document to the DSO.

### DSO

Please review the documents above and if you want to approve them:

- 1) Enter the reference numbers as appropriate
- 2) Electronically sign this document
- 3) Save it to a local drive (You will be prompted to do this)
- 3) eMail the signed document to the originator

### IF YOU DO NOT WANT TO AUTHORISE THE FORMS,

Please do not sign the form, but click the "Not Approved" check-box and return it to the originator by email stating why and what you expect them to do to put it right in the comments box below.

Not Approved

Supervisors Signature

### Form Reference Numbers

Risk Assessment

SAF/MEME/8643

Method Statement

COSHH Assessment

DSO Signature

### **This document set must be reviewed and re-approved at the following times:**

- 1) After the first occurrence of the activity described above (Review only)
- 2) After any change to the procedure or reagents used
- 3) After any incident resulting from this activity
- 4) At least annually from the date of approval

Next Review:

28 Jul 2026

Review comments

This risk assessment in accordance with document SAF/MEME/7905\* & CoSHH ref SAF/MEME/2185-2239

This risk assessment in accordance with document above\* and SAF/MEME/7976 - (KS 28/07/2025)