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BMSF Laboratory Manual



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BMSF LABORATORY COORDINATOR

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About the BMSF Laboratories

There are three BMSF laboratories across the UNSW Kensington Campus:

1. Wallace Wurth (C27), Level 4 NW
2. June Griffith (F10), Basement
3. Biosciences Precinct (E26), Level 2 S

Access Requirements - normal & after-hours

Business hours are Monday to Friday, 8:00 AM – 6:00 PM. All inducted users to the BMSF will have this access.

After-hours access is granted ONLY when the relevant after-hours application is completed and approved by the Director of BMSF. This will depend on the nature of the work to be performed, the user's experience and successful completion of the relevant paperwork. Users should contact the Laboratory Coordinator if they wish to request after-hours access.

AFTER HOURS = 6:00 PM – 8:00AM + ALL HOURS ON WEEKENDS

Your Responsibilities at BMSF

Your responsibilities as a BMSF user are to:

- **Participate** in applicable induction and training programs
- **Make proper use** of all safety devices and personal protective equipment (PPE)
- **Maintain high standards of personal hygiene** when working with hazardous substances - **all researchers working at the BMSF are expected to keep their respective areas free of clutter at the end of the day**
- **Clean glassware** used by you while working at BMSF
- **Report** any defects to equipment, accidents, and unsafe incidents to BMSF staff as soon as possible
- **Understand that access is for inducted users only.** Swipe cards must not be shared with other users. This is a breach of safety regulations
- **NOT bring visitors or other researchers** without previous approval from the Director or Laboratory Coordinator. This is a breach of safety regulations
- **Follow safe work practices at all times** (including storage, waste minimization and disposal, and safe handling), and encourage others to do the same

- **Co-operate with any legislated or reasonable policy or procedure** relating to health and safety (i.e. UNSW HS policies, procedures and guidelines and BMSF HS protocols)
- **Seek information or advice** regarding hazards and procedures before carrying out new or unfamiliar work

External users may pick up a visitor's card from reception on arrival. Visitor's cards must be returned by 6:00 PM on the same day they are issued.

Users who do not follow the lab rules will have their access revoked.

Laboratory Inductions

Inductions are arranged through the Laboratory Coordinator after BMSF staff determine that you will require one.

Each BMSF laboratory requires a separate induction in order to gain access.

Induction consists of:

- Visiting our BMSF Inductions [webpage](#)
- Registering to the BMSF node on ACLS
- Submitting a completed Project Registration Form (PRF). This is to be completed by you and approved by your supervisor. Your supervisor is to send the form to the Laboratory Coordinator as approval
- Reading the required documents on ACLS/Salus (where applicable)
- Correctly answering all questions in the relevant questionnaire for each lab
- Attending an induction tour. This is the final step.

Training requirements

Laboratory inductions do not constitute automatic access to an instrument.

Once inductions are complete, you will be able to arrange training on one of the BMSF mass spectrometers or associated equipment.

Training on the mass spectrometers requires one-on-one training with a BMSF staff member.

You will also be required to read and "Declare as Read" the relevant safety documentation on ACLS/Salus. Your trainer will advise you about this during training.

Personal Protective Equipment

Fully enclosed footwear is required in the wet lab (PC1) and instrument lab areas.

Lab coats and gloves must be worn in the PC1 laboratory and **should not** be worn in the instrument laboratory, office areas, kitchen areas, bathrooms or passenger lifts. Safety glasses may be worn in the instrument laboratory, depending on the task performed.

All PPE required, excluding enclosed footwear, are provided by the BMSF as general use items for all users.

BMSF door handles are “Gloves off”.

Other Safety Requirements

Headphones or earphones are NOT permitted in instrument and wet lab areas.

Food or drink is NOT allowed in wet or instrument lab areas.

Risk Assessments and Risk Management Forms

Risk Management Forms (RMF) have been completed for the operation of all major equipment and for the preparation of routine samples and common solutions used within the laboratory.

Risk Assessments are completed when users are performing procedures that are unique or not within the scope of the existing risk assessments. For this, users are required to complete an RMF for each of these new procedures and have the forms approved by a BMSF staff member (normally the trainer/BMSF supervisor) before commencing work in the laboratory.

Safe Work Procedures

The purpose of SWPs is to inform the operator of the safest way to perform a procedure. SWPs are available for each major instrument and are displayed near the relevant instrument. An electronic copy is also available on Salus and ACLS.

On successful completion of instrument training, users are required to acknowledge that they are aware of, and competent in, the correct operation of the instrument by declaring the SWP and/or RMF as read on ACLS/Salus.

Reporting Hazards and Incidents

Staff and students should report hazards and incidents by notifying a BMSF staff member first then online via myUNSW.

Visitors external to the university will need to report the incident or hazard to a BMSF staff member so a report can be lodged on their behalf.

HS Representative

Contact **Anjaneyaswamy Ravipati**, Research Officer, for any safety related matters you wish you raise.

Chemical Storage

Laboratory chemicals are stored in the appropriate chemical cabinet (eg, flammables, corrosives, toxic, etc).

The location of chemical cabinets at all BMSF lab will be shown as part of induction.







Waste Disposal

There are several types of waste throughout the PC1 and instrument labs:

1. Gloves waste (*BMSF June Griffith F10 only*)
2. Domestic waste – do not dispose of gloves, samples, tubes, etc here
3. Contaminated vial waste
4. Biohazard waste – disposable face masks and gloves disposed of here
5. Broken glass waste – clean and contaminated
6. Sharps waste (in sharps bin)
7. Non-halogenated, halogenated waste and HPLC waste
8. Cardboard waste – if there are many boxes, they are to be disposed of in the nearest blue bins, outside the labs

WASTE DISPOSAL GUIDE

TYPE OF WASTE	CORRECT WASTE	COMMENTS
	 	<p>Gloves and contaminated paper must go into the biological solid waste</p> <p>OR</p> <p>gloves waste bins.</p>
		<p>Disposable face masks must go into the biological waste bin</p>
		<p>Objects with sharp points or edges, broken capillaries, syringes, needles, etc. must go into the sharp bins</p>
		<p>Clean broken glass only. No contaminated glass or vials.</p>

		<p>Capped vials only, partially empty</p>
		<p>Contaminated glass waste Glass containing organic solvents must be dry in the fume hood before disposing.</p>
<p>Halogenated Waste</p>		<p>Liquid waste containing F, Cl, Br, or I</p>
<p>Non-halogenated Waste</p>		<p>Liquid Waste that does not contain F, Cl, Br, or I</p>

If you have any questions about waste disposal in the lab, please speak with the Laboratory Coordinator.

Local HS web resources

- UNSW Health and Safety Website (<https://www.unsw.edu.au/planning-assurance/safety>)
- Chemical Inventory: Jaggaer (<https://www.unsw.edu.au/planning-assurance/safety/systems/Jaggaer>)
- Salus SharePoint page for UNSW staff and students (<https://unsw.sharepoint.com/sites/ProjectSalus>)
- Salus (<https://apac.ehssrisk.sai360.net/unsw/#/main>)
- ACLS (<https://acls.analytical.unsw.edu.au/>)

Data File Policy

The BMSF provides all researchers with the ability to collect, save, transfer and store their research data including access to centrally supported IT resources for data storage and archiving effectively and efficiently.

However, all researchers must ensure that they safely back-up and archive their own research data as part of their overall project plan. The BMSF will not take any responsibility for lost or damaged files.

We recommend each user copy their files for local storage and back up on their personal computers. If copying files to a USB device, the device must first be virus checked on the user's personal computer before being inserted into a BMSF data analysis computer.

Under no circumstances should a USB device be inserted into an instrument computer.

Printing Policy

Printers within the BMSF are for BMSF staff use only.

Emergency Response Plan

1. Warning alarm sounds (**beep-beep**) indicate you should cease work and make the area safe for your departure.
2. Once the second evacuation alarm sounds (**whoop-whoop**) and/or verbal instructions by the emergency warning system are heard, occupants should evacuate the building via the closest fire stairs and assemble in the designated assembly point (diagrams for each lab are in the following pages). NB: Do not use stairs other than the fire stairs as **only fire stairs allow occupants to safely exit the building**.

Local Emergency Evacuation Procedure

Oxygen monitors are located in both the PC1 and instrument labs. If the level of oxygen drops from 21% to 19% an alarm will sound and the indicator lights in the laboratory will illuminate. If this happens you are required to leave the BMSF immediately; however, you may remain in the building.

Break Glass Alarms at UNSW

There are three types of break glass alarms on campus. They are:

Red - this puts the building into alarm and alerts the fire brigade (most commonly used if there is a fire and the detectors do not activate).



White - this puts the building into alarm but does not alert the fire brigade (alarm goes back to Security only).



Green - these override the door access control (breaking this glass will allow the door to open).



C27 Wallace Wurth Laboratory Information

Local Area Hazards and Risks (C27)

Wet Lab Areas (402, 402A): chemical, biological, high voltage, moving parts, sharps and low temperatures.

Instrument Area (401): chemical, moving parts, sharps, high temperatures, magnetic fields, and poor air quality.

Emergency Contacts (C27)

UNSW Security (Emergencies): 9385 6666 or x 56666

UNSW Security (General): 9385 6000 or x 56000

University Health Service (Quadrangle Building): 9385 5425 or x 55425

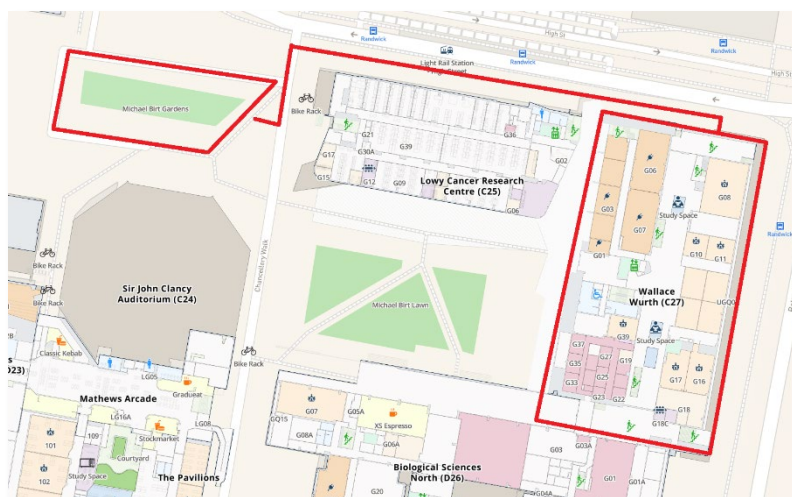
Name	Position	Extension
Mark Raftery	BMSF Director	x 51892
Martin Bucknall (Fire Warden)	BMSF Principal Scientist	x 54707
Sydney Liu Lau (First Aid Officer)	BMSF Laboratory Coordinator	x 59115
Valerie Wasinger (First Aid Officer)	BMSF Senior Research Scientist	x 51678

The assembly point for BMSF (C27 – Wallace Wurth) is **Michael Birt Gardens, through Gate 9.**

Do not assemble at the gate – this is for emergency vehicles to enter.

**DO NOT USE LIFTS
OR ENTER ADJA-
CENT BUILDINGS.**

Emergency Assembly Point (C27)



E26 Biosciences Precinct Laboratory Information

Local Area Hazards and Risks (E26)

Wet Lab Area (2002): chemical, biological, high voltage, moving parts, sharps and low temperatures.

Instrument Area (2012): chemical, moving parts, sharps, high temperatures, and poor air quality.

Emergency Contacts (E26)

UNSW Security (Emergencies): 9385 6666 or x 56666

UNSW Security (General): 9385 6000 or x 56000

University Health Service (Quadrangle Building): 9385 5425 or x 55425

Name	Position	Extension/mo- bile
Russ Pickford	Small Molecules Team Leader	x 52952
Mark Raftery	BMSF Director	x 51892
Sydney Liu Lau	BMSF Laboratory Coordinator	x 59115
Emma Johansson Beves (Fire Warden)	Flow Cytometry Facility Manager	0413 381 213
Rhys Stark (First Aid Officer)	Ramaciotti Laboratory Staff	0404 758 120

Emergency Assembly Point (E26)

The assembly point for BMSF (E26 – Biosciences Precinct) is **Michael Birt Gardens**.

DO NOT USE LIFTS OR ENTER ADJACENT BUILDINGS.



F10 June Griffith Laboratory Information

Local Area Hazards and Risks (F10)

Wet Lab Area (B32): chemical, moving parts and sharps.

Instrument Area (B50): chemical, moving parts, sharps and high temperatures.

Emergency Contacts (F10)

UNSW Security (Emergencies): 9385 6666 or x 56666

UNSW Security (General): 9385 6000 or x 56000

University Health Service (Quadrangle Building): 9385 5425 or x 55425

Name	Position	Extension
Lewis Adler (Fire Warden)	Senior Technical Officer	9385 7739
Sarowar Chowdhury (First Aid Officer)	Research Officer	9348 1699
Russ Pickford	Small Molecules Team Leader	9385 2952
Mark Raftery	BMSF Director	9385 1892
Sydney Liu Lau	BMSF Laboratory Coordinator	9385 9115

Emergency Assembly Point (F10)

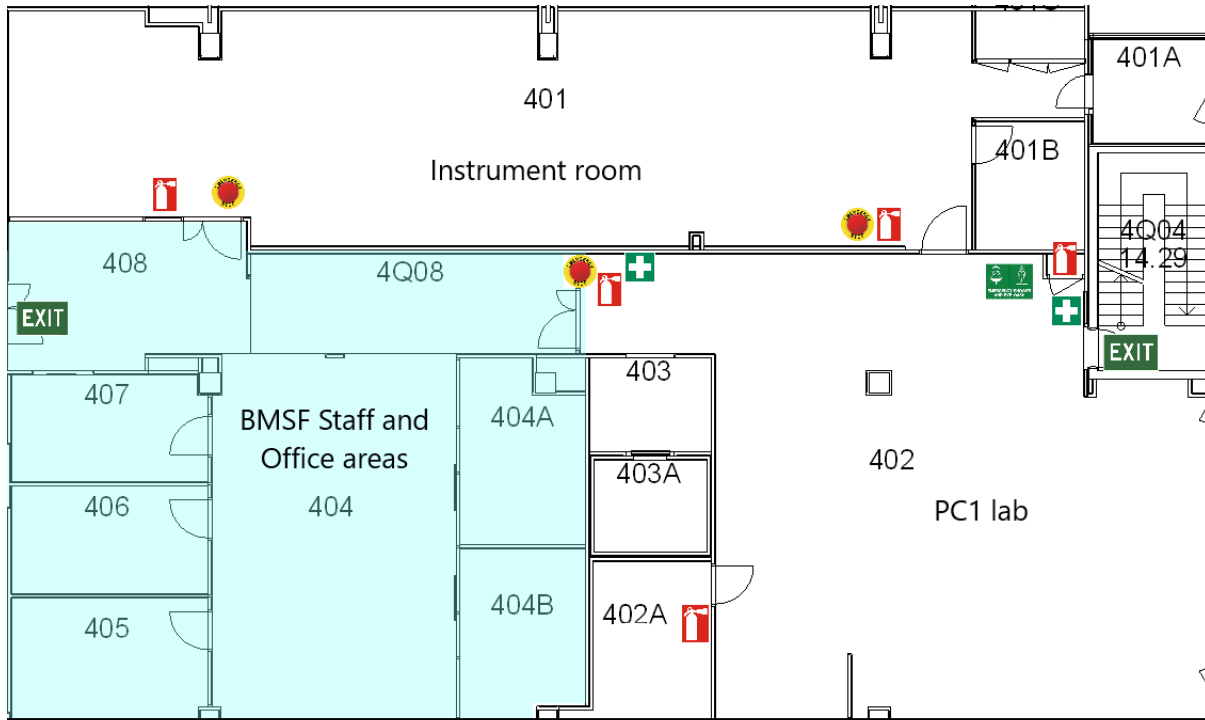







The assembly point for BMSF (F10 – June Griffith) is **the Village Green**.

DO NOT USE LIFTS.

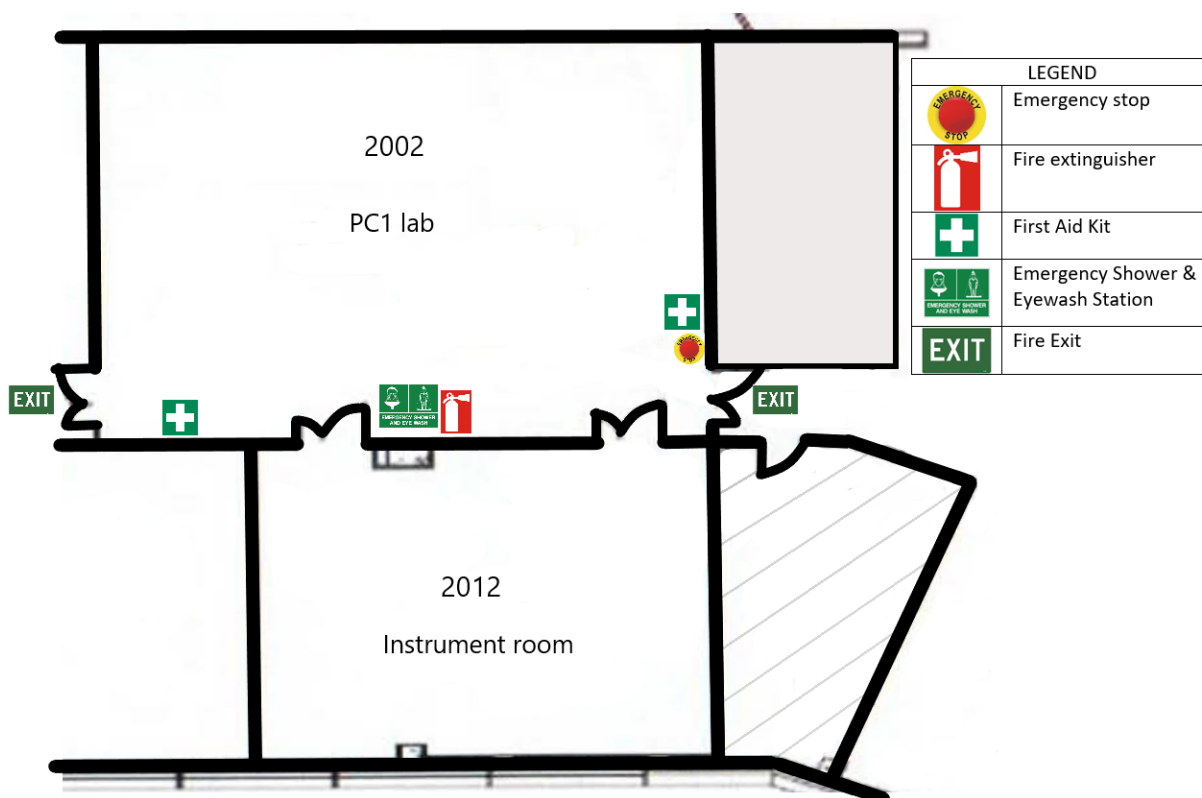
Appendix

Laboratory Map for BMSF at C27 Wallace Wurth



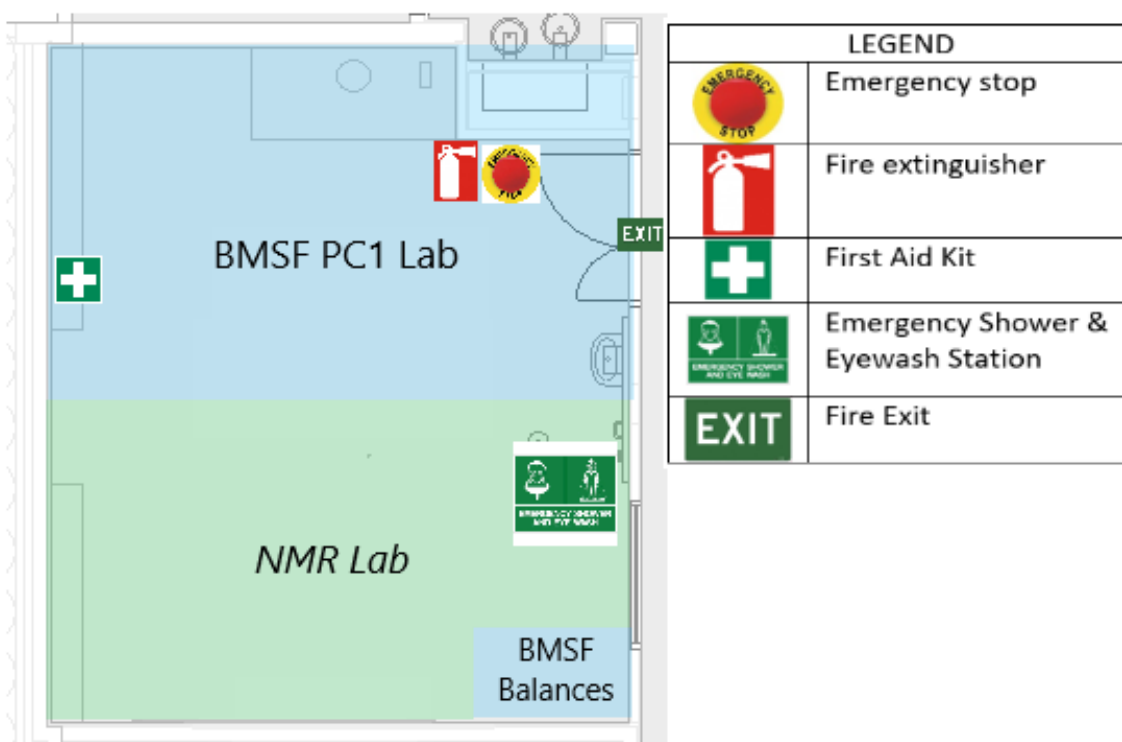
LEGEND	
	Emergency stop
	Fire extinguisher
	First Aid Kit
	Emergency Shower & Eyewash Station
	Fire Exit

Laboratory Map for BMSF at E26 Biosciences Precinct



Laboratory Maps for BMSF at F10 June Griffith

Lab B32



Lab B50

