



CRICOS PROVIDER 00123M

# **Adelaide Microscopy**

## **Health, Safety and Wellbeing Induction**

**[adelaide.edu.au](https://adelaide.edu.au)**

CRICOS Provider Number 00123M

# Introduction

## Hello and welcome to Adelaide Microscopy

### **HSW overview:**

This training module has been developed for clients of Adelaide Microscopy at the University of Adelaide and forms part of the HSW training program at the facility. Completion of this training course is intended to provide clients with a broad general understanding of many of the HSW hazards and safety controls in our laboratory setting.

### **Topics covered include:**

Chemical Safety; Biological Materials; Quarantine Materials; Environmental considerations; Laboratory Waste; Emergency Procedures; Spill Kits; First Aid; Safety Showers; Eyewash Stations; Unattended Experiments; Common Laboratory Equipment; Gas Safety; Cryogenic Materials; Personal Protective Equipment; PC2 requirements and Booking access.

Your safety and our duty of care to you are paramount to us at Adelaide Microscopy.

### **Employees**

Employees, students and associates of the University have an obligation to follow safe working procedures at all times, and to take all reasonable precautions to prevent personal injury or injury to others and damage to plant and equipment. Users are required to follow University of Adelaide rules and regulations for laboratory use.

The University of Adelaide Health, Safety and Wellbeing Induction, and specific courses such as Chemical Management, and Biological Management (including OGTR and DFF (Quarantine)) can be found via <http://www.adelaide.edu.au/hr/hsw/training/>

# About Adelaide Microscopy

Adelaide Microscopy is The University of Adelaide's centre for advanced Microscopy and Microanalysis. We have four facilities servicing two campuses.

Reception Hours: 9am-2pm, Monday to Thursday.

Microscopy staff are available during general office hours.

For after-hours access (with no staff assistance) see Reception.

Web page [www.adelaide.edu.au/microscopy](http://www.adelaide.edu.au/microscopy)

Email [microscopy@adelaide.edu.au](mailto:microscopy@adelaide.edu.au)

Contact telephone: +61 8 8313 5855

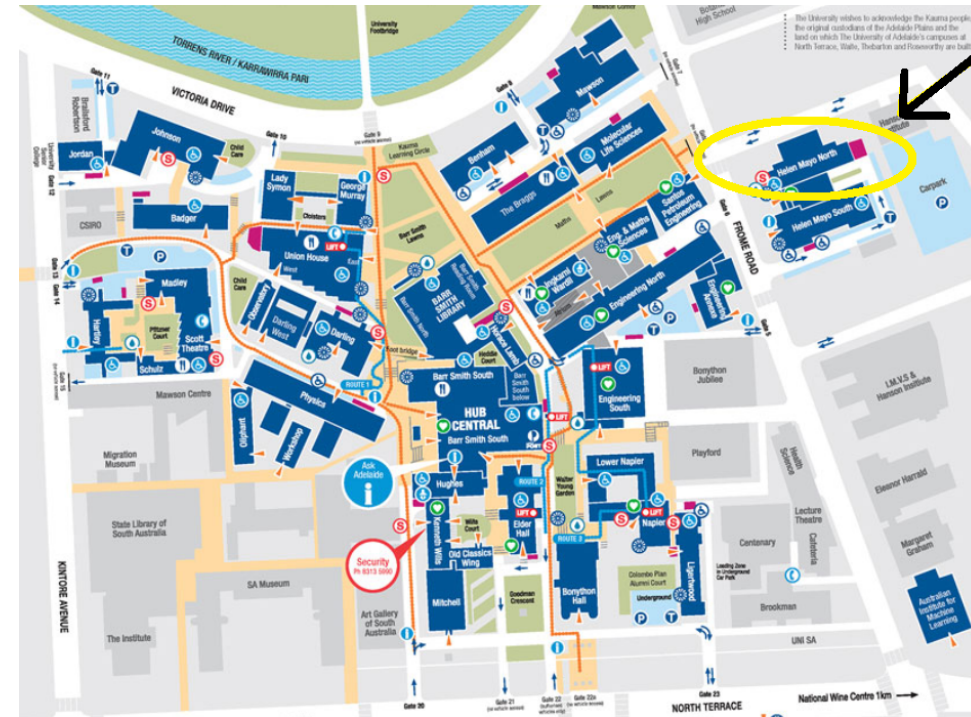
**Adelaide Microscopy Helen Mayo North Facility** is located on the ground and basement levels in the Helen Mayo North Building on Frome Road, Adelaide.

Reception: Ground Floor NG13, Helen Mayo North, Frome Road  
The University of Adelaide SA 5005 AUSTRALIA.

**Adelaide Health and Medical Science (AHMS) Facility** is located on level 6 of the AHMS Building on North Terrace, Adelaide.

**The Bio-imaging Facility** is located on the ground floor of the MLS Building on North Tce Campus, Adelaide.

Map Adelaide Microscopy Main Facility



**Adelaide Microscopy Waite Facility** is located in Agriculture Food & Wine (west wing, Bldg#19) Hartley Grove Waite Campus Urrbrae SA 5064

Contact telephone: +61 8 8313 1069, location map - <http://www.adelaide.edu.au/campuses/mapscurrent/waite.pdf>

Adelaide Microscopy is part of the South Australian Facility of Microscopy Australia (formerly AMMRF). Visit the web site for more information <https://micro.org.au/>

# Staff

**Mr Angus Netting** – Director

**Dr Agatha Labrinidis** - Senior Microscopist, AHMS Facility

**Dr Animesh Basak** – Dual Beam Engineer (FIB)

**Dr Ashley Slattery** – TEM Senior Microscopist

**Dr Benjamin Wade** – Senior Microscopist

**Mr Chris Leigh** – Biological Electron Microscopist

**Dr Fiona Whelan** – Cryo-TEM Microscopist

**Dr Gwen Mayo** – Supervisor, Waite Facility

**Dr Jane Sibbons** – Bioscience Imaging Microscopist

**Mr Ken Neubauer** – Microscopist

**Dr Sarah Gilbert** – Microanalysis Specialist

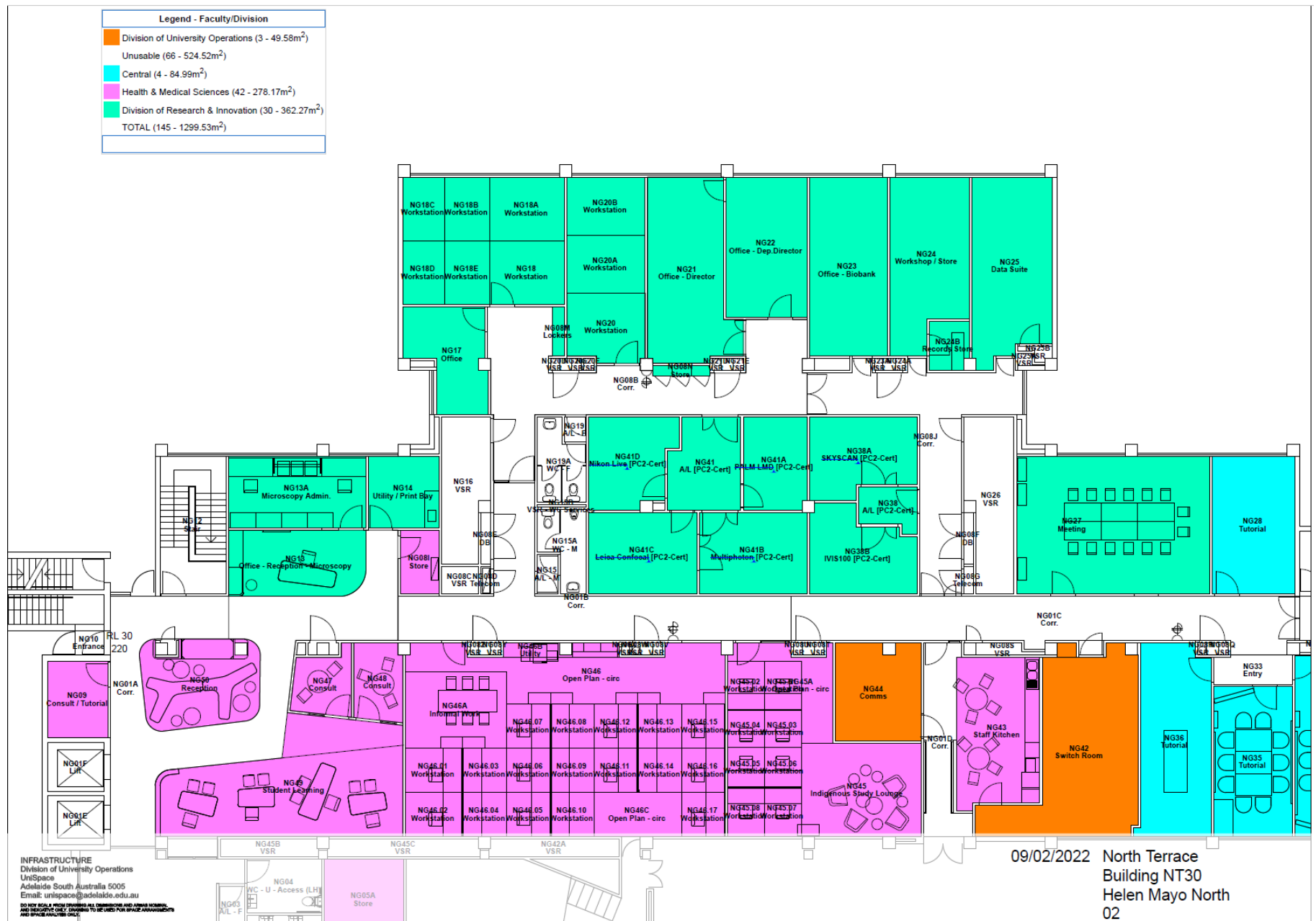
**Dr Bryant Roberts** - Data and Infomatics Specialist

**Stacey Williams** – Administration Manager

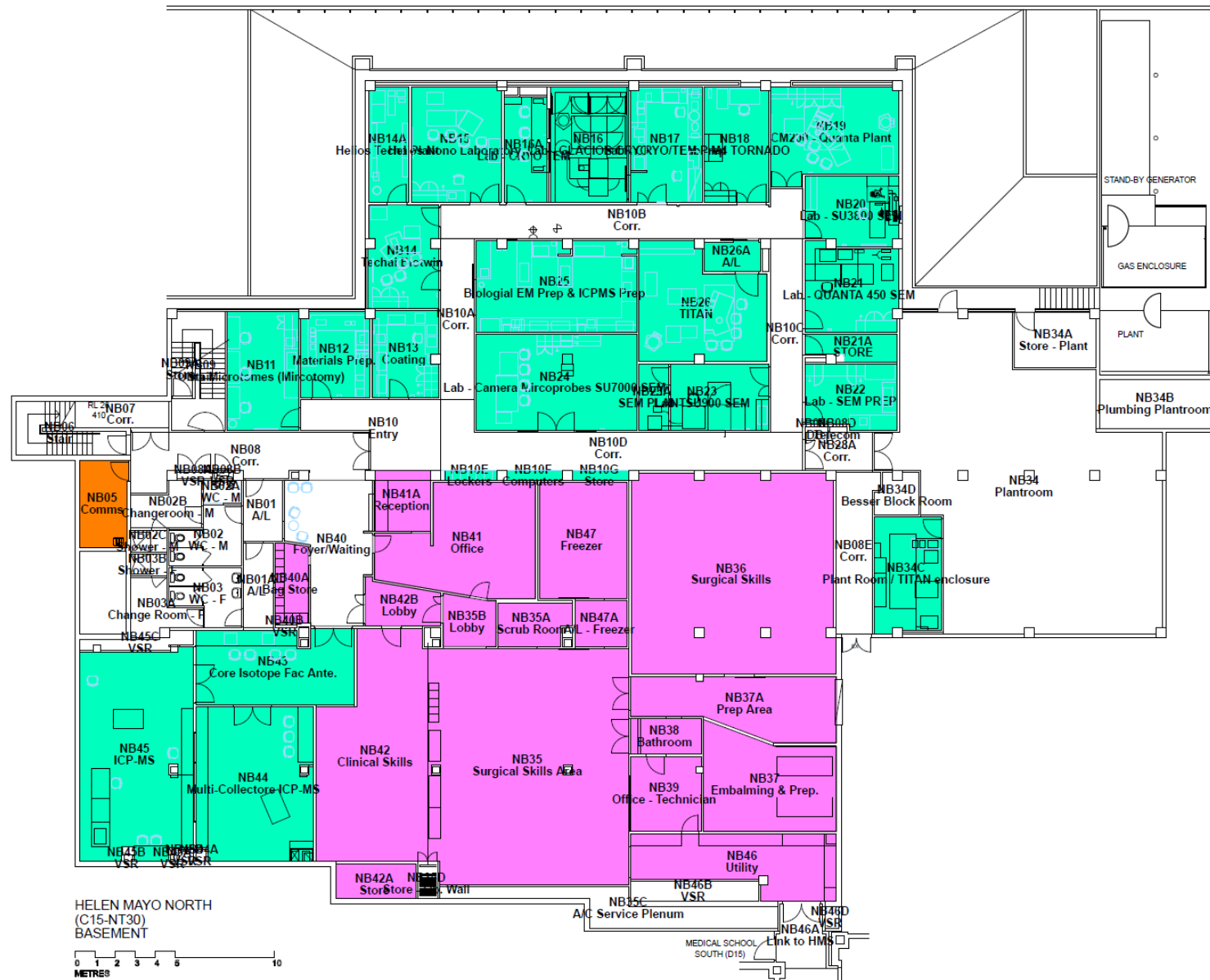
**Terry Utting** – Administrative Officer / Reception



# Floor plan– North Tce Ground Floor



# Floor plan– North Tce Basement



## AHMS Floor plan

Please refer to current floor plan on display inside the facility

## Waite Floor plan

Please refer to current floor plan on display inside the facility

## Bioimaging (MLS) Floor plan

Please refer to current floor plan on display inside the facility

## Emergency Contacts

Should you require assistance in a life-threatening emergency: Always phone (0)00 and then Security office ext 35444.

In all other emergencies contact Security who will provide you with assistance:

### **North Terrace Security (Emergency only)**

Phone: 8313 5444

### **Roseworthy – Thebarton – Waite**

Emergency Services (Fire, Police, Ambulance)

Phone: 000

### **Health & Safety (including Radiation Safety)**

Phone: 8313 4641

### **After Hours Pager Service**

Phone: 8378 2624

During business hours please see Adelaide Microscopy Staff or report to Reception in Helen Mayo North Building (NG13 or phone 8313 5855) for any assistance.



# First Aid Officers

## **Helen Mayo North Facility**

First Aid Officer: Sarah Gilbert (NG18)

First Aid Officer: Chris Leigh (NG20)

## **AHMS Facility**

First Aid Officer: Agatha Labrinidis

## **Bioimaging Facility**

First Aid and HSW Officer: Jane Sibbons

## **Waite Facility**

First Aid Officer: Gwen Mayo

All incidents, injuries or illnesses must be reported to appropriate First Aid or HSW Officer or Helen Mayo North Reception.

# Fire Safety

## North Tce Facility

In the event of a fire, the alarm will sound. Immediately evacuate the building and assemble on the **lawn area in front of the Mawson Building** (corner Frome Road and Victoria Drive). Refer to evacuation maps and signage in the facilities for exit points.

North Tce Fire Wardens:

Sarah Gilbert (NG18) for basement

Animesh Basak (NG18) for ground floor

## AHMS Facility

In the event of a fire, the alarm will sound. Immediately evacuate the building and assemble **outside of the SAHMRI building**. Refer to evacuation maps and signage in the facilities for exit points.

## Bioimaging Facility

In the event of a fire, the alarm will sound. Immediately evacuate the building and assemble **outside of the Santos building**. Refer to evacuation maps and signage in the facilities for exit points.

## Waite Facility

In the event of a fire, the alarm will sound. Immediately evacuate the building via passageway and assemble on the **lawn area on Hartley Grove across from Building 19**. Refer to evacuation maps and signage in the facilities for exit points.

Waite Facility Fire Warden:

Gwen Mayo (G3B)

# Personal Protective Equipment (PPE)

Footwear – Enclosed shoes must be worn at all times. No open toe shoes.

Lab coats, safety glasses and gloves are available throughout the laboratory and must be worn at all times while in the biological sample preparation areas. PC2 users are required to adhere to strict PPE code.

Face shields and disposable masks are available on request (see staff for assistance).

Contaminated gloves must not be worn outside the laboratory areas. Discard all used gloves into appropriate waste containers in the laboratory.

Noise cancelling headphones and/or earplugs are available on request (see staff for assistance).

Cryogenic gloves are available for working hazardous ultra-cold environments (see staff for assistance).

# Chemical Safety

Chemical Safety Management training must be completed before working with any chemicals at an Adelaide Microscopy facility.

<https://www.adelaide.edu.au/hr/hsw/hsw-faqs/chemical-safety-management-faqs>

The main environmental impacts/risks associated with the centre are the generation, use, and disposal of hazardous chemicals. Be aware of handling, spill and disposal procedures for all chemicals you use in the centre. If unsure, ask staff before you use them. Refer to the Chemical Safety Management web site for more information.

# Gas and LN2 Safety

Only Adelaide Microscopy staff are permitted to handle liquid nitrogen. In the event of a liquid nitrogen spill evacuate immediately to a well-ventilated area and call for emergency assistance.

## **Gas Alarms Adelaide Microscopy Main Facility**

Low Oxygen, Hydrogen and SF<sub>6</sub> gas alarms are installed in room NB16, NB25, NB26, NB19, NB21, NB44 and NB45 which houses potential oxygen displacing gases. In the event of an alarm the gas supply to the building will shut off. In the case of the alarm sounding follow evacuation procedure and call emergency. Do not re-enter the lab until you have been notified by security or staff that it is safe to enter.

There is another gas alarm system on the wall near the coating room (NB13), and in the Isotope Laboratory foyer (NB44) these alarms are non-urgent. Please report any Emergency (red) alarms to staff.

# Fume Hoods

All work containing resins and biological EM processing chemicals **MUST** be carried out in the designated fume hood (consultation with staff is mandatory before working with chemicals).

Small volumes of ethanol may be used outside the fume hood ensuring adequate ventilation.

All other chemicals with 'avoid vapour' risk/health statements are to be used in the fume hood.

All waste produced in the fume hood must go into the relevant labelled waste containers in the fume hood.

In the event of fire or electrical fault the fume hoods will shut down automatically.

In the event of a local fire outside the fume hood, turn off electrical equipment by pushing the **red** button.



# PC2 Laboratories

PC2 Facility Manager – TBA

The following personal protective equipment must be worn when undertaking dealings in the facility:

- A.** Protective clothing to afford protection to the arms and front part of the body. NOTE: Rear-fastening gowns are provided.
- B.** Disposable gloves must be worn when dealing with GM viral vectors or GMOs which fit into the classification of Risk Group 2 organisms, as described in AS/NZS 2243

All contaminated waste must be disposed of in the sharps or yellow hazardous bins provided. A separate training form must be completed and kept on file at Adelaide Microscopy by all users entering the PC2 Lab.

All users handling animals must have completed the animal handling safety training prior to accessing our facility.

The following instruments are located in the PC2 laboratory:

MicroCT Skyscan 1072, 1076 and 1276

IVIS Lumina

Olympus LEXT Profilometer

Nikon Stereo SMZ25 Optical Microscope

# General Safety Measures

Spill Kits and safety showers are located on all levels. Keep access to these areas clear at all times. To activate the shower pull on the chain. Safety shower use will cause flooding, this is OK – no power sources are located at a low level in the area.

Eye Wash kits are located in the First Aid Kit and in those laboratories where it is mandatory to have access to them.

Fire extinguishers are located in all corridors and some rooms and in the hallways outside Rooms NB22 and NB30.

Users are to report any spills or accidents to staff immediately. Please report low stock of gloves and other items or over flowing bins to Adelaide Microscopy staff.

Gas alarms are fitted to certain rooms containing gases that may pose a risk if leaking occurs.

**NO food or drink** is permitted in any area of the prep laboratories or instrument rooms. Visitors at North Tce can use room NG42.

Make sure to take your samples with you when you leave. We do not take responsibility for lost samples. Keep your workspace tidy and remove any rubbish on leaving.

SOPs (Safe Operating Procedures) are available for all instruments. As part of your induction you must read the relevant safe operating procedure before you access the equipment.

# Waste Disposal

## Bins

General Waste bins – are to be used for standard office waste (no hazardous waste)

Paper Recycling Bin – Uncontaminated non-glossy paper can be placed in the large blue recycle bin on the ground floor.

Sharps Bin – all blades, needles and knives must be disposed in the yellow sharps bins located in various rooms. No sharps are permitted on or in the sink.

Broken Glass Bin– can be placed in the waste bin labelled “glass waste only” in the Basement rear corridor (North Tce)

Biohazard Bins - Biological waste must be disposed of in the yellow biohazard bins.

Hazardous waste - should be placed in designated waste containers in fume hood.

Resin Waste Bin - Use only disposable plastic ware for resins (e.g. plastic vials) – plastic ware contaminated with resin must be discarded in the resin waste bin.

If unsure see Adelaide Microscopy staff or refer to the Chemwatch website

## Used Glassware

For glassware used in the fume hood (i.e. had contained water-miscible toxic chemicals) rinse first in the fume hood sink and then place next to the sink outside of the fume hood.

Used glass pipettes and contaminated disposable plastic ware must be disposed in the yellow biohazard bins.

# Instrument Booking Rules

All new users are required to complete the online registration form before being inducted and booked on instruments at Adelaide Microscopy.

Booking rights will not be issued until:

- Your Training Record has been completed as instructed by your trainer.
- You have demonstrated competency in the use of the equipment independently.
- Access will then be given during 8am to 5pm weekdays.
- After-hours access may be arranged later, following approval from your trainer.

To maximise the use of instruments and equipment at Adelaide Microscopy and to provide a fair allocation of time to all users of the facility, the following conditions should be observed when booking instruments:

- Minimum booking time on ALL instruments is 1/2 hour.
- Maximum booking time on ALL instruments is 5 hours in one core period (9am - 5pm) of any one day.
- Longer bookings can be made out of core periods or by consultation with staff.
- Bookings can only be made by users who have been given booking rights.
- The user who booked the session must be the person attending the session and is responsible for the instrument and any charges incurred. Users or supervisors with booking rights are not permitted to book for other users.
- If you need to cancel a booking, please call 8313 5855, email or notify a staff member, this helps to free up session times for other users. Cancellations made within 24 hours of the booking will be charged 100% of the booking fee.

# Visitors

Visitors are welcome at Adelaide Microscopy but a quick induction is required for anyone working or visiting the laboratory for a prolonged time. Please sign the visitor's book at reception.

# Publications

It is important to the future of our facility that you acknowledge **Adelaide Microscopy at The University of Adelaide, a Microscopy Australia facility** for the microscopy and microanalysis services you have accessed as part of any publication you produce.

We also ask you to send a copy of the publication for our records. We report these back to the federal government annually to help maintain future funding and communicate the growth areas and demands of researchers accessing our services. It also demonstrates the impact that the government funded infrastructure has on enhancing research outcomes. With your help we can ensure a stable future for research. Please email any publications or special achievements to [microscopy@adelaide.edu.au](mailto:microscopy@adelaide.edu.au)



THE UNIVERSITY  

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*of* ADELAIDE