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| Laboratory/Workshop Induction  |

This outlines the specific induction and authorization requirements for UNSW laboratories. It lists the generic risk controls established by the laboratory. In addition, training will be provided for plant, equipment and safe work practices. Note – you can use OHS006 OHS Induction Form in conjunction with this form. This Laboratory Induction and Authorisation Form must be completed and signed before access to the laboratory is granted.

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| Faculty/School/Unit : **DVC (Research), Mark Wainwright Analytical Centre, 524 MWAC PC2 lab** |
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| Laboratory location, eg building number, name: **E8 Science and Engineering building, Level 5**  |

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| Laboratory identification, eg room number, name: **Shared office space 526, PC2 lab 524, Isolated TC 524A, Microtomy suite 524B, Microscopy 524C, Training Tissue Culture 524D** |

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| Your name: zID: | Signature: |
| Your supervisor name: | Signature: |
| Officer name:  | Signature: |
| Date induction completed: / /  |

**General Requirements** Note, user means inductee

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| The laboratory manager must explain the following to all inductees | (tick when completed) |
| Access requirements – normal & after hours* Access is given to E8 SEB building and Mark Wainwright Analytical Centre, MWAC PC2 lab 524 and office 526 on level 5 after completion of induction.
* **General User Access – Monday to Friday 8am to 6pm**
* After-hours access is granted only for use of the instrument you have been trained on. No Biological EM sample preparation is permitted after-hours.
* After-hours users must use a “Buddy” system whereby a colleague, friend or family member is informed that you intend to use the MWAC Pc2 lab after-hours (Specify room number). The “Buddy” needs to be informed when you commence and when you plan to finish your work and to contact UNSW Security in case of emergency. Please talk to one of the staff for after-hours access.
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| Risk Assessments and Safe Working Procedures (SWP)* User has written **risk management** and **SWP** for project that includes work to be done in MWAC PC2 labs (responsibility of user and supervisor)
* MWAC PC2 lab **risk assessments** and **SWPs** are located on-site and on SafeSys website https://safesys.unsw.edu.au.
* Trainer to go through **risk assessment** and **SWP** relevant to specific instrument and task with user at the first training session
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| Personal Protective Equipment in **PC2 area** (**PC2 lab 524, Isolated TC 524A, Microtomy suite 524B, Microscopy 524C, Training TC 524D**)  |

* + Appropriate PPE must be worn (lab gown, gloves) as per PPE MWAC PC2 lab SWP form. **Safety glasses must be worn at all times in the main lab 524.**
	+ **Non-absorbent enclosed shoes**, e.g. rubber/plastic/leather boots. Users will be denied entry if wearing inappropriate shoes.
	+ No bags, food or drinks allowed in lab areas, long hair tied back.
	+ Only bring in items that are required in labs. Leave non-essential items/bags in shared office 526.
	+ Users must wash hands after completing their work.
	+ No gloves allowed on microscopes, microtomes or door handles.
	+ **Samples** are to be **double contained** in unbreakable sealed containers during transport. **Live samples** **are to** **be double contained at all times.**
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| Safety equipment – location, use, operation* **Fire stairs** → located at the east and west corners of E8.
* **Amenities** → toilets located at the south corner of E8
* **Service and goods lift** – to be used when required for sample transport
* **Fire extinguishers** – to be used in event of fires
* In the far back corner of 524 main lab next to the fume hoods

 * **Safety showers and eye wash stations** – to be used in emergency when needed, located in the main lab 524 entries
* **Hand wash basins** – wash hands before leaving PC2 area
* Located in the main lab 524 entries
* **Telephones and contact lists**
* First point of contact for spills, emergency, accidents – x52973
* Contact: **Nicholas Ariotti** x 57397, 0430 599 868, **Katie Levick** 0405 540 943

 **Joanna Biazik-Richmond** 0450 601 365, **Natasha Kaushik** 0452 212 714, **Gregory Harm** 0437 029 779* **Spill kits** – to clean up chemical spills and PC2 accidents. Osmium and general chemical spill kits located near fume hoods.
* **Life Safety System** – LSS informs users of gas leaks using an alarm system and can remotely shut off gas into the laboratory
* **First aid kits** – to provide relief for minor injuries. Contact First Aid Officer, Joanna Biazik-Richmond 0450 601 365
* Located near the main lab 524 entry.
* **Emergency flipcharts**– contains information on what to do in event of fire, injury, etc
* Located near the main lab 524 entries
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| Laboratory records including checklists and inspections - Risk management forms and SWPs also located in labs with respective instruments and on UNSW SafeSys website. | 🞎 |
| Chemical storage.* User to follow SDS on use and storage of chemicals.
* Hazardous substances to be stored appropriately in accordance with risk assessments and SDS.
* User to provide name and associated risk and risk assessment if bringing hazardous substances.
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| Chemical register and Material Safety Data Sheets (SDS)* Physical copies located in the main lab 524, digital copies kept in on DVCR/analytical driver
* User to have read and understood SDS for respective chemicals they use or bring to the labs.
* User to consult SDS in event of spillage or injury or emergency involving chemicals.
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| Waste disposal system – User is expected to understand the various types of waste and to dispose in the appropriately labeled bins:* **Biological** – yellow bins located in all labs
* **Chemica**l – Chemical liquid waste located in the fume hoods, Cytotoxic waste in purple containers, tissue culture and biological liquid waste treated with 4% bleach and disposed of as chemical waste
* **Sharps** – yellow bins located in each room
* **Broken glass** – white bin located under the fume hood
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| Laboratory Emergency Response Plan – follow UNSW emergency flipchart* First aid officer – Joanna Biazik-Richmond 0450 601 365
* Nearest first aid kit in labs – located near both laboratory entries
* In event of spills OR incident OR gas leak
	+ leave the area immediately and notify staff who will advise on procedures, organize cleanup and provide appropriate forms
	+ complete appropriate forms such as Hazard/Incident Report
* After hours, contact Security x56666
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| Evacuation and emergency procedure – follow UNSW Emergency flowchartFor FIRE* 2 alarms → First, beep sound – to alert you, shutdown and prepare to leave

 → Second, whoop sound – evacuate towards High street exit to Alumni Lawn as directed by Fire WardensFor GAS* 2 alarms → First, red flashing lights to alert you that there is a gas leak, leave the laboratory and contact a staff member

 → Second, a loud high pitched audible alarm, evacuate the laboratory and contact a staff member | 🞎 |
| Laboratory Licensing Conditions eg OGTR certified, QAP, Radiation, PC2 – HS strictly enforced* All laboratories are PC2 rated
* Live animals are not allowed in the laboratories
* Approval is required prior to bringing in hazardous substances, viral transfected cell lines, or cell lines derived from GMOs
* User must read Behavioural Requirements for OGTR-certified PC2 Laboratory document – DVCRES-ANALYT-SWP-10495 - on SafeSys UNSW website
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| Review local HS Web resources – location of UNSW and BMIF HS information on policies, procedures, forms, etc* UNSW HS website – <http://www.ohs.unsw.edu.au/>
* HS database – <http://safesys.unsw.edu.au/>, for risk assessments, safe work procedures and other OHS information
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| Compliance – User agrees to comply * HS requirement – cooperate fully
* UNSW policies and procedures
* BMIF and EMU Terms and Conditions for booking and login systems
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| Identified Risks/Hazards – Nicholas Ariotti x 57397, 0430 599 868, * Slips and Trips
* Environment – Temperature, humidity, noise
* Biological – as per OGTR paragraph
* Chemical – toxics such as Osmium and Lead, corrosives, flammables, and radioactive such as Uranium
* Gases – non-flammable CO2 and nitrogen
* Gases – flammable ethane and hydrogen
 | * Electric shock
* Laser and mercury vapours – on microscopes
* Lighting – can be dim/dark with closed curtains
* Ergonomic –break after every 2 hours at microscope and microtomes
* Sharps/broken glass
* High pressure hazard instruments
* Heat hazards – hot plates and ovens
* Cryogens and low temperature instruments
* Centrifuges hazards
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| Contacts – notify in event of spills, injury, hazards, incidents, accidents, emergency* Assoc. Director – **Nicholas Ariotti**, extn: 59342, email: n.ariotti@unsw.edu.au 0430 599 868
* Laboratory Manager **Katie Levick** k.levick@unsw.edu.au 0405 540 943
* **Joanna Biazik-Richmond** joanna.richmond@gmail.com 0450 601 365
* **Natasha Kaushik** natasha.kaushik@unsw.edu.au 0452 212 714
* Imaging Specialist and Trainer – **Iveta Slapetova**, extn: 51726, email: i.slapetova@unsw.edu.au, C25 Lower Ground shared office
* Research Assistant and Trainer – **Celine Heu**, extn: 51721, email: c.heu@unsw.edu.au, C25 Lower Ground LG12
* Head of BMIF **Renee Whan** +61 2 9385 9342, r.whan@unsw.edu.au 411A, Level 4, Lowy Cancer Research Centre C25
* After hours contact – **Security** extn: 56666
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| *Induction Checklist* |  |
| **Must** provide evidence of completion of* Ergonomic & Manual tasks
* Laboratory Safety Awareness
* Hazardous Substances Online
* Health & Safety Awareness
* PC2 Bio Safety training
* Behavioural Requirements of OGTR-certified PC2 Laboratory (DVCRES-ANALYT-SWP-10495)
* COVID-19 Behavioural Requirements and PPE in BMIF labs
 | **Must** provide working with hazardous substance in the MWAC PC2 lab * name and associated risk(s)
* Completed and signed **risk management form**
* **Safety Data Sheet** for each hazardous substance

**Must** provide approved NLRD or Exempt Dealings if bringing to MWAC PC2 abs,* Viral transfected cell lines
* Cell lines derived from GMOs
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I, ………………..………………..............…………….... (user), have undertaken the HS induction to MWAC PC2 office and laboratory areas. I agree to abide by all the above requirements as outlined by the Laboratory Manager and contained in this form.

 Signature: Date:

I, ………………………………………………………... (officer), have inducted and authorized the above mentioned user to access MWAC PC2 areas.

Signature: Date:

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🞎 Staff or 🞎 Student, ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

School / Centre: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Building Location: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Type of work to be carried out in MWAC PC2 labs**

*Only risk group 2 organisms are allowed in MWAC lab*. Approval is required prior to bringing in higher risk group organisms, for example viral transfected cell lines or cell lines derived from GMOs, as these MUST no longer be viable. Radiation work and live animals are not allowed in any BMIF lab.

**Research Topic** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Fixed Cells **and/or** 🞎 Live Cells 🞎 Bacteria **Cell Line (ATCC® No.)/or Bacteria:**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

🞎 **Yes** 🞎 **No** GMOs or cell lines derived from GMOs – if yes, provide approved 🞎 NLRD **or** 🞎 Exempt Dealings

🞎 **Yes** 🞎 **No** Viral transfected cells – if yes, provide approved 🞎 NLRD **or** 🞎 Exempt Dealings

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| **Chemical number** | **Reagent / Product or solvent used**:flamesmallName or other identifier such as molecular formula or structure | Overall risk associated with chemicals used after taking handling and dilution into account.Rate risk as **L = Low**, **M = Medium** or **H = High** | Precautions & handling – take account of quantity, dilution, other chemical hazards & disposal. |
| corrosionsmall | healthhazardsmall | skullsmall | exclamationsmall | flameovercirclesmall | explosivesmall | cylindersmall | Aquatic-pollut-red |  |
| FlammableCarcinogen/mutagen | Corrosive | Carcinogen/mutagen | Toxic (severe) | Toxic / skin irritant | Oxidiser | Explosive | Gas under pressure | Aquatic toxicity |
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**Equipment(s) to be used, please indicate**

**Main lab 524**

🞎 **Plunge Freezer** 🞎 **Glow discharge** 🞎 **Milli Q Water system**

🞎 **Large benchtop centrifuge** 🞎 **Biowave**

🞎 **Bacterial Work** 🞎 **pH Meter**

**Tissue Culture - Isolated 524A**

🞎 **Biosafety cabinet 1** 🞎 **Incubator**

🞎 **Epifluorescent microscope**

**Microtomy room 524B**

🞎 **Reichart RT microtome** 🞎 **Leica UC6 RT microtome**

🞎 **Leica Cryo UC6 microtome**

**Microscopy room 524C**

🞎 **Nikon T12 live cell microscope** 🞎 **Multimode 8 AFM**

🞎 **Zeiss 800 Confocal Microscope**

**Tissue culture - Training 524D**

🞎 **Cytotoxic cabinet** 🞎 **Cytotoxic incubator**

🞎 **Biosafety cabinet 2** 🞎 **Regular incubator**

🞎 **Electroporator** 🞎 **Centrifuge**

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