COVID-19 Workspace Safety Plan

Use of this template: All light italicized grey font are instructional and should be removed in the final version of this Plan. The Plan must be approved within your <<Department>> or <<Faculty>> before activity can resume in the workspace. Any modification of the requirements outlined in this template must contact Safety & Risk Services for approval.

This workspace safety plan will assist Principal Investigators who wish to continue or resume research activities in their lab. This plan will include a review of activities to be undertaken in the lab to ensure effective controls are in place to prevent the spread of COVID-19. Principal Investigators are responsible for ensuring this document reflects current government guidance and notices which can be found, along with information about UBC’s response to the pandemic at [https://covid19.ubc.ca/](https://covid19.ubc.ca/).

Name of Building (if applicable) Brimacombe
Address of Building (if applicable) 2355 East Mall
Work Space Location (Rooms and/or description of space. For high head and other large rooms that are shared, indicate the area for which you are applying. You may cover multiple rooms and spaces – e.g. CRN high head plus new wing – or submit separate forms for each space.) Rm 063

Introduction
This lab contains two instruments, a Zeiss SEM and a Nanoindentor. The SEM is used heavily by many groups, the nanoindentor by only one group (that of Rizhi Wang). The SEM is managed by an electron microscopy technician, Heli Eunike.

Reference Documents:
The following guidance documents and resources on the [Safety & Risk Services (SRS) COVID-19 Website](https://covid19.ubc.ca/) were used in the development of this workspace plan:
BERP, Phase 1 Brimacombe building plan, available at Brimacombe reception and at [www.ampel.ubc.ca](http://www.ampel.ubc.ca) as of June 8th. List any other relevant guidance documents or resources used for your work space plan.

General Procedure:
The following general procedures align with guidelines set by the BCCDC to prevent the spread of COVID-19. Please describe how some or all of the methods below will be used in your lab:
• Room 063 will be limited to occupation by a single person at a time throughout the Phase 1 restart. Booking will be through the established booking system we have been using for several years, with the addition of email communications from the user to Heli confirming any bookings that are made. No training of new users will take place.
• For this initial period, access to the SEM is being reduced to 1/3 of the regular users, with consolidated imaging sessions where possible to reduce inter-usage sanitization requirements.
• The SEM contains multiple surfaces that may become contaminated between users. Where possible users will be asked to bring their own tools, including tweezer and keyboard. Items that must be shared, such as the SEM control panel, mouse, joystick and instrument access handles, will be sanitized by the user before she/he begins, and when she/he is finished with the session using spray bottles and wipes provided by the lab.
• Gloves and non-surgical masks will be used at all times, to be put on outside the room and taken off after leaving the room. The entrance door handle will be sanitized upon entry, and after leaving, by each user using wipes outside the room.
• Heli Eunike will enter the room only if called because of a problem, and when she does the current user will first leave the room to retain max occupancy of one.
• The SEM desk surface will be sanitized with a spray bottle when beginning and ending work.
• The nanoindenter will have only one user through the restart period, so sanitization of the nanoindenter itself is not required for that instrument though gloves and a mask will be worn. When the user is at the nanoindenter no one will use the SEM.
• Spray bottles and wipes will be available at each instrument and outside the entrance door.
• In addition to SEM and nanoindenter use, Rm 063 is accessed daily by Nanofab staff to check gas bottle pressure and change when needed. This access will be booked, as for the SEM.
• Although bookings start and end on the hour or half-hour, users will be expected to arrive 5 minutes after their appointed start time, and leave at least 5 minutes before their end time, in order to ensure that two users do not encounter each other and to provide brief moments when the SEM technician can enter the room to check the state of the instrument.

Workspace Activities:
The following safety plans must be followed:

Regulations of room access will be posted on the door of 063, as will the schedule for the week, each week printed out fresh by Heli.

Direction of Travel
• There should never be overlap of people in 063, so there is no issue of Direction of Travel. In the accidental case that one user enters and finds another already there. The new user will exit and the previous user will come out immediately after to discuss the confusion and find a resolution, keeping a 2m separation.

Labs & Offices
• Only one person at a time will be in 063, so 2m separation is automatic.
• The following sanitization procedure will be followed for the SEM, at the beginning and end of a period of work:
  o Spray-sanitize SEM door handle
  o Spray-sanitize desk surface and chair
  o Wipe-sanitize SEM control pane, mouse and joystick.
Each user will have a plastic bag or box, kept in 063, where they will keep their keyboard, mouse, and tweezers. At the beginning of their usage time they will take the keyboard and tools out of the bag, attach the keyboard to the computer and begin work. The keyboard and tools will be packed up at the end of the session.

A Working Along Program is attached. The hazards present in the room require check-ins every 4-8 hours. To ensure safety working alone, the status of the user will be confirmed once midday and once at the end of the day. This confirmation will take the form of the emailed sanitation forms when users leave, or an in-person check-in by Heli Eunike or a designate in the case that no confirmation documents were received. In case of a problem Campus Security will be called.
Personal Protective Equipment (PPE):
After applying the Hierarchy of Controls to meet COVID-19 requirements, the following activities will require personal protective equipment:

<table>
<thead>
<tr>
<th>#</th>
<th>Type of PPE</th>
<th>Activity and PPE Use Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Non-surgical mask</td>
<td>At all times, to reduce surface contamination</td>
</tr>
<tr>
<td>2</td>
<td>Fresh nitrile gloves</td>
<td>At all times, to reduce surface contamination of potential pathogens as well as to keep finger oils off the instrument.</td>
</tr>
</tbody>
</table>

Communications Plan
- Complete safety documents will be posted on the door to 063. As well, paper documents detailing safety protocols upon arrival and departure will be filled out and signed each session, including check-off’s of the sanitation procedure followed. Cell phone photos of the documents will be taken by the lab member and emailed to the Heli and to Joshua Folk immediately upon leaving 063, after each session.
- Booking of the SEM will take place as always via our booking system, monitored by Heli. Booking access for 2/3 of the users will be restricted during the Phase 1 restart. The user of the nanoindenter will book the room as a phantom SEM user, to avoid occupancy conflicts and to avoid having to develop a new booking system.
- Heli Eunike and Joshua Folk will approve of the weekly schedule before the beginning of the work-week, including possibly requiring users to modify their booking times to ensure maximal safe access by all groups. The approved schedule will be posted on the room door Monday morning.

Monitoring
Joshua Folk and Heli Eunike are responsible for monitoring compliance with the plan. Folk will be working remotely, but Heli will be on-site and will confirm that protocols are being followed by random checks at the door to 063 (requiring just a brief opening, but not requiring her to enter the room).

Emergency Procedures:
Building Emergency Response Plan (BERP)
Provide location (website, internal drive location, poster boards etc.) and purpose of the document e.g. copy available at reception, and also soon at www.ampel.ubc.ca
Signatures:
I confirm that this Safety Plan has been shared with research personnel who will be accessing this space both through email and will be made available as a shared document. Staff can either provide a signature or email confirmation that they have received, read and understood the contents of the plan.

Date: 9 June 2020
Name (Manager or Supervisor): Joshua Folk (contact details below)
Title: Associate Professor
Signature: Signed

Approvals
Date: 9 June 2020
Name (AMPEL): John D Madden
Title: Director
Signature: Signed

Date: 9 June 2020
Name (PHAS Department): Colin Gay
Title: Department Head
Signature: Signed

Faculty and Staff Occupying Work Space (please indicate approximate weekly hours of access)

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Version: May 28th, 2020
Appendix

Please link to any maps, pictures, applicable UBC Guidance documents and other regulatory requirements referred to in document.

Brimacombe key map and High Head map may be useful to help describe procedures for your lab. They were attached to an email on May 29th from AMPEL.dir@ubc.ca