



COVID-19 Workspace Safety Plan Stage 2 Amendment for: <Madden, Brimacombe 341, 341A, 343, 343A, 176 >

UBC is starting Phase/Stage 2 of the COVID-19 response. Timing of the restart and requirements may vary by Faculty. This form is intended to amend the original workspace plan submitted as part of the Phase 1 return to research. The amendment will be reviewed by members of the Local Safety Team and/or by others appointed by the Director of AMPEL.

During Stage 2, the overall laboratory occupancy should be the lower of either 2/3rds of normal occupancy, or the maximum number of people allowable given physical distancing requirements and access considerations. Weekend (7AM-6PM) access may now be requested. Faculty office use may be allowed in a limited number of cases.

In this document, workspace plan refers to the Return to Research document or Workspace Safety Plan that was filled out and approved as part of phase I. Stage II refers to the next phase (Stage 2 follows Phase 1).

1. Occupancy

Normally occupancy will stay the same as it was in Phase 1, unless modifications are requested. If changes are requested, please indicate the new occupancy levels and provide a map depicting the individual workstations. Include a 2 m diameter circle for scaling. Also provide arrows indicating directions of circulation, if appropriate.

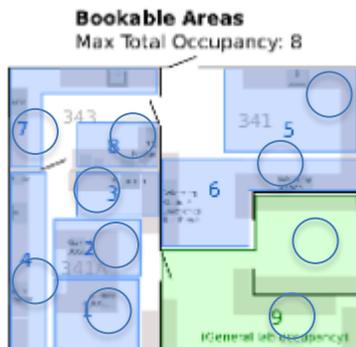


Figure 1: Layout (not to scale – see below phase I plan for a scale drawing) including lab benches and desks. Approx. 14 m x 14 m total. North is downwards. Circles represent typical locations of personnel. Note that there will be a maximum of 8 occupied.

In stage 2 there will be up to **8 occupants** in the lab at any time. In phase I our maximum occupancy between all spaces was 6.

2. Updated Access List for Laboratory Space:

How many researchers and others normally have access to the laboratory space?

22

How many do you plan to have return at this time? Only those for whom access is important for completing their work should be admitted.

22 total returning.

Please provide a list of all those who you wish to have access to laboratory space in Stage II.

Access is for all spaces (341, 341A, 343, 343A).



Occasional requests from outside users to use of the Bose Electroforce (DMA) system, the Atomic Force Microscope and the Electrochemical Impedance Spectroscopy System will be considered. These users will need to have completed all safety and user training plus sign-offs, and be scheduled in using the Google scheduling system for the lab. Authorization will be required by John Madden.

3. Working within 2 m:

Working in close proximity should be avoided where possible. Double protection is required (face mask plus face shield) for people working within 2 m. Nitrile gloves and a lab coat are recommended.

Are there situations (training, special procedures etc.) where two or more people will need to work in close proximity?

YES

Please describe the situations, including frequency, duration, and any hazards associated with them. How will the hazards and COVID-19 risks be mitigated? If already covered in the workplan, simply mention this and refer to the section/page.

On occasion situations arise where work within 2 m may be necessary e.g. during training for the use of equipment such as the potentiostat and the Bose Dynamic Mechanical Analyzer. In such cases double protection will be used (face mask, face shield). Both users will also wear lab coats and nitrile gloves. The time of interaction will be minimized, and is not expected to exceed 15 minutes over the course of an hour training session, with the total number of sessions over the next two months being less than 6.

4. Weekend and After-Hours Access:

Access is now possible on weekends from 7 AM to 6 PM. During the weekends occupants should not make use of building common areas, except washrooms. Only the washroom nearest to the lab should be used. Do you plan to have researchers access the lab over the weekend (Saturday/ Sunday 7 AM to 6 PM) or after hours?

YES

After Hours: Normally access between 6 PM and 7 AM is not permitted. If such access is needed, please justify it. For after-hours work, researchers must not impede building cleaning, and should post signage if working during cleaning times.

We request occasional after-hours access to check on and restart long experiments such as battery and mechanical cycling, as well as low frequency electrochemical impedance spectroscopy runs. We also request occasional late evening access for performing demos for our industry collaborators in Japan. All after hours work will be cleared in advance with John Madden. Users will notify John Madden by text when entering and leaving the building. Signage will be posted to indicate to custodial staff that they are not to enter the lab to perform cleaning, if there is a risk of interfering with standard staff hours. Like all users, those in the lab after hours will sanitize the areas they have touched and used before and after use. Common surfaces will also be sanitized before and after, according to the lab checklist. All operations within the lab have a low hazard level. Nonetheless a buddy system will be used, in which any researchers working alone will check in and out, and report every four hours (though we don't anticipate after hours work lasting more than 2 hours).



Describe how will occupancy limits and records of those who were present in the lab will be maintained. You may refer to the pages and sections of the Phase I workspace plan if there are no changes.

Scheduling is done using a Google Sheets sign up. A maximum of 8 people can sign up to use 10 available workspaces. A monitor is designated each day who will report back to the PI. At least 30 minutes must be left between two users who wish to use the same work area in succession. All users will sanitize their workspaces before and after use. Commonly touched surfaces such as doorknobs, tap handles and light switches will be sanitized by the first person to enter and by the last to leave each day, and this will be recorded on the sanitization checklist.

5. Supervision and Working Alone

Please outline any working alone, supervision and other safety procedures. If the procedures have not changed since Phase I, please refer to the relevant section(s)/pages in the workspace plan.

Working alone procedures will be as described in section 4 of this document.

6. Faculty Offices

The Faculty level stage II plan limits the number of faculty returning to 25%. All returning faculty must complete the mandatory safety training. If you are requesting the use of faculty offices, please outline the rationale. Due to the limited access allowed at this time, we may not be able to approve all requests. Prioritization will be based on (in order): 1) Floor wardens or similar roles, 2) Those who do not have access to appropriate working environments elsewhere, 3) Those performing research in the lab, especially early career researchers, and 4) Those with other strong justifications.

Madden's office is BRIM 176. During Phase I and Stage 2 the director's office will instead be used by Sebastian Medrano, Shared Facilities Manager, for intermittent work, needed as part of his duties in supervising and running the shared soft lithography facility, in arranging space changes and instrument moves (e.g. from 344), and in his role as floor warden. He will be the only person accessing the office.

7. Staff and Researcher Office Space

Researchers and office staff who can work from home are expected to continue to work from home. Please contact the AMPEL Director if you have a need to use office space in Brimacombe.

The two office spaces (green areas in Figure 1, rooms 341 and 341A) can be booked for use between experiments. Sanitization and storage must follow the guidelines set out in the workspace plan (section 6, section 5, areas 9/10).

Signatures

I/We agree to abide by the procedures described in the approved phase I workspace plan, as amended by this document. I/We will ensure that all researchers and staff who have access to the spaces covered in this document are aware that they also need to abide by these procedures, and that they complete safety training, including COVID-19 training, before returning to work. They have been made aware of



physical distancing requirements, procedures for working in close proximity (where relevant), scheduling, working alone procedures and other safety considerations. I/We will arrange to keep track of and maintain records of occupancy during the period of COVID-19 restrictions. I/We will arrange for records of completed training and of the procedures (workspace plan and this amendment) to be accessible from the workspaces. Occupancy limits will also be posted in each space.

Principal Investigator (Director or Manager in case of shared facilities)

Name: John D Madden **SIGNED** Signature:
Date: 9 Oct 2020

Approvals

Director of AMPEL or Designate
Name: John Madden **SIGNED** Signature:
Date: 9 Oct 2020

Department Head or Designate

Name: Steve Wilton Signature:
Date: 13 August 2020