

BRIMACOMBE PI Request to Restart Research: Phase I only

Complete this form and submit to John Madden (ampel.dir@ubc.ca) cc'ing Gary Lockhart (Gary.Lockhart@ubc.ca) in order to request approval for restarting research. SBQMI members please also copy Andrea Damascelli (andrea.damascelli@ubc.ca) and Pinder Dosanjh (dosanjh@phas.ubc.ca). Please also cc your department head or appropriate departmental contact. Once approved, complete and sign the Access Agreement (sent to you separately) and have it posted on each exterior lab door.

Applications will be accepted immediately. The re-opening date will depend on approval of faculty level restart plans, in addition to the time taken to review applications. Additional forms and approvals may also be required.

Name: Andrea Damascelli

Department/Institute: Department of Physics and Astronomy/Quantum Matter Institute

Email: damascelli@phas.ubc.ca

Phone#: *****

Standard hours of return: Phase I occupancy 7 AM to 6 PM Monday to Friday.

1. Briefly outline proposed experiments/research that require on-campus access:

We will perform critical maintenance to our scientific equipment, which due to the nature of our research needs to be running continuously. This equipment is the fundamental component of our infrastructure and it has been operating unmaintained during the of working-from-home period. We have been monitoring its performance remotely and we have started to observe signatures of deterioration. The proposed maintenance would be necessary to avoid any possible irreversible failure in case a future UBC lockdown is declared due to the evolution of the covid-19 situation.

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2. Building name: Brimacombe

3. For each room occupied by the PI, indicate the room number, the total number of personnel who usually work in that space, the total number of personnel who need to access the room, and the maximum number who will work in the room at once. Note that UBC is aiming for 1/3 occupancy of spaces during Phase 1, and that there must be space for physical distancing.

Room #	Total # of personnel (usual)	Total # of personnel who need access to the space	Max. # at one time during Phase 1
479	20	18	5

4. Is your lab space shared? Yes

If yes, indicate how you will coordinate with adjacent groups or personnel. For the SEM, 2D materials lab, CRN and similar spaces shared by multiple PIs, please submit one form with the names of all users from multiple groups. For the high head area, please submit one form per research group or service (e.g. Helium), and specify the area and PIs that are involved. You may include part of the high head along with other lab space on one form (e.g. CRN occupies lab space in high head and in the Brimacombe extension). In some cases groups may decide it is easier to submit separate forms for each space they work in. We are flexible in the formats we will accept.

This lab is shared between the Andrea Damascelli and David Jones groups. Inside the lab there are two well-separated, enclosed, and ventilated hutches containing laser systems, one common area with an electron spectrometer, and a separated room with axillary equipment. We propose to conduct maintenance for all mentioned systems – the two lasers, spectrometer and axillary equipment in Phase 1. Personnel from the Jones group will focus on maintaining lasers and personnel from the Damascelli group on the rest of the equipment. One person will be working inside each of the separated areas, for a total of four people working in the room.

5. Describe how you will ensure physical distancing within your lab.

For the planned activities in the areas described in item #4, the personnel will maintain the physical distancing since the different apparatus are well enclosed or at two meters apart. The two-meter distance shall not be breached in the lab under any circumstance. Leaving the lab

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has the higher priority than entering the lab. The same general building policy shall be followed in the lab. A senior member of the group will be designated per day to monitor compliance with the occupancy, distancing, PPE, and general safety. She/he will report to the PI or building manager/floor wardens if needed.

6. How will you schedule occupancy of your lab space? Phase I occupancy 7 AM to 6 PM Monday to Friday. *e.g. online sign up, weekly discussion in lab meeting to prepare a schedule together, other?. Ensure that people on the same shift are not in conflict for the same resources in their own lab. Include an example plan with the application. Schedules should be posted on the lab door weekly. **Note:** at any one time, UBC is aiming for **ca. 1/3 occupancy** during Phase 1. If you request after hours access, this should be thoroughly justified here.*

We will schedule tasks so as to minimize the number of people in the lab and eliminate the need to intermingle. This includes minimizing the personnel moving in and out of the building on a daily basis and reducing the number of different people lab members share the lab space with. The schedule will be posted and recorded on our privately hosted calendar as well as posted on the door.

7. Outline plans to address working alone regulations.

People will not be working alone in the lab. In preparation for each task, we will plan the schedule and inform all involved involved who else will be working in the lab at the same time. On a daily basis, the team will coordinate their arrival and departure timing to assure that no one working in the lab alone.

8. Identify high-contact points that need to be sanitized (doorknobs, fridge handles, switches, communal keyboards, work surfaces, chairs etc.) and all multi-user instruments and equipment in your lab(s), their location, sanitization protocols: this includes items only used by your lab group. The protocols should be posted as a checklist at the entrance for research personnel to complete before and after each shift.

Researchers are required to wear gloves to handle tools of common use in the lab. At the beginning and at the ending of a shift, the personnel will proceed to disinfect the well-defined area where they work. Following high contact points are required to be sanitized after usage, this includes:

- Doorknob and drawer handles
- Keyboards and mice
- Desk surfaces
- Laser goggles.

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9. Are there any tasks where physical distancing cannot be maintained? yes

If yes, describe the task, explain why it is important to perform in the coming month, and describe the frequency and duration of tasks. What safety measures will be taken to mitigate risks?

Upon accessing the lab, we have identified a series of maintenance and repair tasks that would require up to three people working within a 2m space. We envision that these tasks would occur a maximum of twice per day for a period up to 1 hour. The personnel performing these tasks would wear gloves, face mask, and an individual face shield. Each face shield would be disinfected before and after its use.

10. Is equipment in your lab space used by personnel from other labs? No

If yes, explain how you will arrange for other users to access this equipment while maintaining physical distancing. How will this equipment be sanitized between users? List the anticipated users below in section 13.

11. Will you need to access equipment located in other research labs, or your lab equipment housed in shared equipment rooms in your building? No

If yes, list the equipment or room numbers and how will this be arranged. How will this equipment be sanitized between users?

12. Will you need to access equipment or services in other buildings? No

If yes, List. e.g. BiF, Chem Stores, Kaiser, Frank Forward, Henning's, ...

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13. It is mandatory for Phase 1 that all research personnel have appropriate certified training. Will all personnel from your group accessing the lab be certified prior to having access, including new COVID-19 video training? Yes

Identify each of the personnel below who will require access to on-campus space (information will be attached to the fob access to the building):

14. Explain below how you will prioritize research personnel in your group to access lab space.

If the number needs to be significantly reduced, we will prioritize people based on the time urgency of individual projects.

We are organizing the most critical tasks in the lab. These tasks will be performed by a team where two persons are on site focusing on a task at a time, and one person will be in each of the two laser hutches. Each team would be scheduled to perform the critical work on-site for several days and then we will rotate the team. This will minimize the personnel accessing the lab, and the building, at a given time with the goal of reducing the number of different entrances into the building as well as minimizing the number of team changes.

I agree to abide by the rules and procedures I have described above during UBC's Phase 1 of research resumption. I acknowledge that failure to uphold the commitment confirmed here could result in the loss of research access privileges. *Signatures of additional PIs who share the space should be added.*

Signed (PI1): ___ ***Signed*** _____

Date: ___ June 2, 2020 _____

Signed (PI2): _____ ***Signed*** _____

Date: ___ June 2, 2020 _____

AMPEL Director Approval: John D Madden. ___ ***Signed*** _____ 18 June 2020