COVID-19 Workspace Safety Plan – Lab Specific

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/.

This plan must be reviewed by your Local Safety Team, and signed by your Unit Head/Director. Once complete, the plan can be submitted with your online application to return to research.

Resources to Consult

The following guidance documents and resources were used in the development of this plan:

- Preventing Exposure
- Personal Protective Equipment
- Physical Distancing Guidelines
- Reporting COVID-19 Exposure
- Communications Resources
- UBC Research Resumption webpage
- WorksafeBC

Section #1: Lab information

<table>
<thead>
<tr>
<th>Department</th>
<th>Mechanical Engineering</th>
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<tr>
<td>Faculty</td>
<td>Applied Science</td>
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<tr>
<td>Building(s)</td>
<td>Fred Kaiser Building</td>
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<tr>
<td>Lab(s)/workspace(s)</td>
<td>Kaiser 2208, 2214</td>
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Introduction to Your Lab

The research activities of the Stoeber lab are mainly conducted in the Brimacombe building, in Rooms AMPEL 146, 146A, 146B, 146C and 146D (a Phase 1 Workplace Safety Plan (WSP) for this space has already been approved). Some lab members also use AMPEL 143A (Soft Lithography - shared facility – Phase 1 WSP under review), AMPEL 341 (John Madden’s lab – WSP approved), AMPEL 444 (CFET – shared facility – WSP under review) and AMPEL 446 (cleanroom – shared facility – WSP status unknown) and labs in the Pulp and Paper Centre (PPC 108 WSP under review, PPC 121 WSP to be finalized) and in Kaiser 2208 and 2214. The current size of the group is 14 members with 8 new hires by September 2020. The group conducts experimental research on microelectromechanical systems such as microfluidics and sensing technology. We use the facilities to fabricate and characterize microdevices including sensors and microfluidic chips and investigate microflow physics. Room Kaiser 2208 is used as a dark room for optical device characterization.
Section #2 - Risk Assessment

1. Lab/workspace Occupancy (under proposed COVID-19 operations)
List the number of people that will be present in your lab/workspace at the same time. List this by every room/lab/workspace you occupy.

Confirm that you have discussed each employee’s comfort level with returning to work and have addressed any concerns, or will require further assistance in doing so. Any worker (staff, students, faculty, post docs, research associates, technicians and other research personnel) who has concerns about returning to work on campus can request an exemption to his/her supervisor.

- Maximum occupancy of room Kaiser 2208: 1 person
- Kaiser 2214 will only be used to access 2208 and to use the sink in 2214 as well as the washrooms.
- Combined, Kaiser 2208, 2214 and 2215 hold about 43 students. The return of one person corresponds to 2.3% of previous normal operation.
- I have discussed the resumption of research activities plan with all of my students to hear their concerns. I encouraged them to contact me individually to discuss any additional concerns in private.
- Any worker (staff, students, faculty, post docs, research associates, technicians, and other research personnel) who had concerns about returning to work on campus has requested an exemption to the PI.
- Where possible, workers (HQP, research staff, others) are instructed to work from home.
- Anybody who has travelled internationally, been in contact with a clinically confirmed case of COVID-19 or is experiencing “flu like” symptoms MUST stay at home.
- All employees are aware that they must maintain a physical distance of at least 2 meters from each other at all times

2. Hazard Identification
Describe what hazards exist in your lab/workspace; both research-related (chemicals, heavy machinery) and COVID-19-related (areas that require closer personal interaction, equipment/instruments that cannot maintain social distancing i.e. that require >1 person to operate)

No regular hazards exist in this space. COVID-19 related hazards do not apply as only one person is returning to this space.

3. Employee (HQP, research staff, other) Input/Involvement
Detail how you have involved frontline workers (HQP and research staff) and Joint Occupational Health and Safety Committees (JOHSC) and/or Local Safety Teams (LST) in identifying risks and protocols as part of this plan.

Describe how you will publish your plan (online, hardcopy) and otherwise communicate workplace health measures to employees. Guidelines from SRS are available here: https://srs.ubc.ca/covid-19/health-safety-covid-19/working-safely/
The plan has been developed with the support of the Mech LST, and has been approved by them.

The approved final plans will be sent by email to the employee and a copy will be available inside the room Kaiser 2208.

The workplace health measures will be communicated by email to the employee.

The maximum occupancy of 1 person people will be posted in large bold and clearly visible font.

Final plans will be posted to UBC’s COVID-19 Safety Plan website.

Section #3 – Hazard Elimination or Physical Distancing

4. Scheduling
For those required or wanting to resume work at UBC, detail how you are rescheduling employees (e.g. shifted start/end times) in order to limit contact intensity at any given time at UBC.

Discuss your working alone procedures and how they will be adapted for this safety plan. Also describe how you will track those entering/leaving work i.e. sign in/sign out process

- At this time shift-work is not permitted.
- Only one particular PhD student will be allowed to use this space during the Resumption of Research Activities Phase 1.
- A paper sign in/out sign sheet will be attached to the door of room Kaiser 2214.
- No worker is permitted during the Resumption of Research Activities Phase 1 to use the adjacent room Kaiser 2214/2215.
- For working alone procedures, a check-in designate has been nominated, who will check every two hours by phone call or text messages on people working alone. When the check-in designate (buddy) fails to make contact, the buddy will contact Campus Security ten minutes after the first failed contact at 604-822-2222 for an in-person check.

5. Occupancy limits, floor space, and traffic flows
APSC recognizes that labs are dynamic environments and it may be challenging to adhere to physical distancing guidelines. Nonetheless, controls must be in place to keep personnel spaced at least 2m apart at all times. Clear communication of this to employees, monitoring of implementation, in addition to physical controls (signage) are needed.

As such: Using floor plans and/or photographs of your lab/workspace:
1) Identify and list the rooms and maximum occupancy for each workspace/area;
2) Illustrate a 2 metre radius circle around stationary workspaces/benches/instruments and common areas or equivalent approach to social distancing; and
3) Illustrate one-way directional traffic flows

- Only 1 particular person will be allowed in the entire space during Phase 1.
- This lab space is not connected to the 2nd floor of the Kaiser building at the South end of the building. Under normal operation, this lab space can be accessed and exited via the North
stairwell of the building and the North elevator. An additional emergency staircase allows only leaving the space via Kaiser 2215.
The current building plan has designated the regular North stairwell to be used for exiting the building. The North elevator will therefore have to be used to enter the lab space. According to the building plan, the North entrance will be used to access the elevator.

Section 4 – Engineering Controls

6. Cleaning and Hygiene
Detail the cleaning and hygiene regimen required to be completed by HQP, research staff and the PIs for common areas/surfaces (Custodial has limitations on cleaning frequency, etc.).

Outline specific cleaning processes and schedule for high-touch equipment, specialized/sensitive equipment or other unique circumstances to your lab/workspace. Detail how and what types of cleaning products and disposal options you will provide. If possible, include cleaning stations/infrastructure on your lab photos/plan.
• After entering the space via the elevator, the employee will wash their hands at the sink in Kaiser 2214.
• Hand sanitizer will be available in Kaiser 2208.
• Spray disinfectant and cleaning wipes are located at the sink. The user will have the responsibility to sanitize personal and common surfaces at the beginning and at the end of each session.
• List of high-contact points to be cleaned at the end of each use of the space:
  o Doors to Kaiser 2208 and to the washrooms
    ▪ handles on both sides
  o Sink
    ▪ Faucet
    ▪ Handles
• A sanitation checklist will be available on the door to Kaiser 2208.
• The cleaning supplies will be disposed of in the regular garbage bin.

7. Equipment Removal/Sanitation
Detail your appropriate removal of unnecessary tools/equipment/access to areas and/or adequate sanitation for items that must be shared that may elevate risk of transmission, both research-related (i.e. instruments, tools) and general (i.e. coffee makers in break rooms)

• The space will be used by only one particular PhD student.
• There is no shared equipment.
• The lab does not have larger pieces of equipment that require >1 person to operate.
• The lab members are not supposed to access meeting rooms in the building nor the meeting area within KAIS 1214.
• The microwave, coffee maker, and fridge in KAIS 1214 are closed during this phase.

8. Safety Infrastructure Requests (Partitions, Plexiglass installation)
Describe any needs for safety infrastructure i.e. physical barriers, plexiglass installation required for your lab/workspace and if possible include them on your photos/room plan.

• There is no need for safety infrastructure.

Section 5 – Administrative Controls

9. Communication & Training Strategy for Employees
Describe how you (the PI) have or will communicate the risk of exposure to COVID-19 in the workplace to your HQP/research staff/other employees and the safety controls in place to reduce such risk.

Detail how you will ensure that all employees successfully complete the Preventing COVID-19 Infection in the Workplace online training and orientation to your specific safety plan

• Employees with symptoms MUST stay home!
• Before coming to UBC, all employees, students and visitors must monitor their health status. If you are feeling unwell in any way, do not come in, and follow medical advice. Further instructions at bccdc.ca
- If you believe you have been exposed to COVID-19 in the workplace notify Boris Stoeber immediately.
- Likewise, employees are asked to raise safety concerns with the PI.
- Records of the completed training courses for all personnel under the PI supervision, and the signed statement that the personnel have read and understood the building, university and WorkSafe policies relevant to the Phase I of the Resumption of Research Activities will be kept.
- The required cleaning procedures are outlined in the Workspace Safety Plan.

10. Signage
Detail the type of signage you will utilize and how it will be placed (e.g. floor decals denoting one-way walkways and doors, ‘cleanliness state’ of equipment/instruments, hand-washing guidance). See WorksafeBC for signage guidelines and templates.

- The UBC Washing-Hands-Poster will be posted at the sink.

11. Emergency Procedures & Reporting
PIs must ensure that all employees entering the lab should be aware of the Building Emergency Response Plan (BERP) and have access to it. If applicable, detail your strategy to amend your lab’s emergency response plan procedures during COVID-19.


12. Monitoring
Describe how you will monitor your workplace (supervisor, departmental safety representative, other) and update your plans as needed; detail how employees can raise safety concerns (e.g. via the JOHSC or Supervisor).

- All employees know they have the right to refuse unsafe work. Employees can raise concerns to Boris Stoeber, [boris.stoeber@ubc.ca](mailto:boris.stoeber@ubc.ca), to the Mechanical Engineering LST, or the JOHSC.
- Persons responsible for implementing and then monitoring compliance with the plan:
  - One designated lab member at each time.
  - Boris Stoeber, [boris.stoeber@ubc.ca](mailto:boris.stoeber@ubc.ca)
  - A designated faculty member or Jennifer Pelletier in special circumstance, upon request of the PI.
- Accidents, incidents, and near misses will be reported to CAIRS.ubc.ca immediately upon resolution of the matter at hand.

Section #6 – Personal Protective Equipment (PPE)

13. Personal Protective Equipment
UBC has a [central process for purchasing PPE](https://srs.ubc.ca/covid-19/health-safety-covid-19). Describe what PPE you will require for your lab.
The Stoebek lab does not need PPE for this lab space.

Acknowledgement

I confirm that this Safety Plan has been shared with all workers (HQP, research personnel, etc.) who will be accessing this space both through email and will be made available as a shared document. Workers can either provide a signature or email confirmation that they have received, read and understood the contents of the plan.

Date: June 15, 2020
Name (Manager or Supervisor): Boris Stoebek
Title: Professor

Department/School Head/Director Approval

Steve Feng, Department Head
Name, Title
Signature
Appendix

**Signage & Occupancy**

- **Occupancy Limit & Sign in/out sheet & Sanitation checklist**
- **Workspace**
  - Occupancy: 1 person
- **Exit stairwell**
- **Emergency exit stairwell**

- **Occupancy:**
  - 0 persons
  - 1 person

- **Washrooms**
- **UBC Washing-Hands-Poster**
- **Sink**