UNIVERSITY OF TORONTO
FACULTY OF MEDICINE

REVISED MAY 28/20

PLAN FOR RESTART & RECOVERY OF RESEARCH AT THE FACULTY OF MEDICINE: GUIDELINES FOR STAKEHOLDERS UNDER ONGOING COVID-19 CONDITIONS

In late April 2020 the Vice Dean, Research and Innovation, Professor Richard Hegele, struck a task group to develop recommendations that would allow the Faculty of Medicine to begin to plan the restart and recovery of its research enterprise.

Professor Hegele and the Dean of the Faculty of Medicine, Professor Trevor Young, are indebted to the members of the Task Group for the thorough, fast work and excellent recommendations: Co-Chairs Professor Trevor Moraes, Dept. of Biochemistry and Jeremy Knight, Research Operations, Members: Prof. Dana Philpott, Dept. of Immunology; Michael Scott, Purchasing and Logistics; Ayoob Ghalami, Senior Biosafety Officer, UofT; Yang Ting Shek, Manager, Occupational. Health & Safety, UofT; Ian Welch, Director, Div. of Comparative Medicine; Sara Sharifpoor, Director, Research Operations & Strategy, Donnelly Centre; Liam Mitchell, Senior Project Manager, Office of the Dean; Heather Taylor, Director, Faculty of Medicine Facilities Management and Space Planning; Dr. Peter Mastrangelo, Senior Research Associate, Dept. of Laboratory Medicine and Pathobiology; Hannah Kozlowski, MD/PhD Student.

NOTE: The Task Group formally submitted their report to the Dean and Vice Dean, Research and Innovation on May 7, 2020. The following is an iterative working document drafted by the Task Group and added to by the leadership of the Faculty of Medicine in consultation with the central University and TAHSN partners. The intent of this document is to begin discussions on establishing guidelines of the restart of research in the Faculty of Medicine. All recommendations are subject to approval by the University of Toronto central administration.

1.0 Fundamental Principles

All applicable institutional, local, provincial and federal public health directives and guidelines must be diligently followed at all times. The present plan to restart research is informed by and compliant with:

- Province of Ontario's Framework for Reopening our Province;
- City of Toronto's Strategies to Increase Physical Distancing and Spread Reduction for Community Partners;
- University of Toronto
- TAHSNr
- The Association of Faculties of Medicine of Canada's (AFMC) Return to Research Guidelines (Appendix A).

Any faculty, librarian, staff or student employee who tests positive for COVID-19 must immediately report this result directly to U of T's Occupational Health Nurse by email at ehs.occhealth@utoronto.ca. *Full details of this process are outlined in the Provost's* PDAD&C Memo #53, *published on March 17th, 2020.*

The health and safety of Faculty of Medicine (FoM) personnel **is the priority at all times**. This includes incorporating newly accepted norms of hygiene, physical distancing and use of personal protective equipment (PPE), where necessary, in all areas of research to prevent the spread of COVID-19.

Researchers, trainees and staff must agree to uphold all guidelines upon returning to work; those found to be in violation of the principles and/or guidelines outlined below, or communicated in any other form, may have their research privileges restricted.

2.0 Research Buildings

Faculty of Medicine researchers, staff and students are engaged in research in U of T owned spaces, U of T leased spaces, as well as at TAHSN and affiliated hospitals.

University-Owned Space

- Medical Sciences Building (MSB)
- Terrence Donnelly Centre for Cellular and Biomolecular Research (CCBR)
- 500 University Avenue – *Rehab Sector location*

University-Leased Space

- MaRS Tower West – 14th, 15th and 16th Floors
- Krembil Research Tower at Toronto Western Hospital (UHN) – *Tanz Centre location*

Other TAHSN Hospital Research Institute Space

- University Health Network Research Institutes
- Lunenfeld-Tanenbaum Research Institute (Mount Sinai Hospital)
- Baycrest Research Institute
- Li Ka Shing Research Institute (Unity Health Toronto)
- Peter Gilgan Research Institute (Hospital for Sick Children)
- Sunnybrook Research Institute
- Holland Bloorview Research Institute
- Centre for Addiction and Mental Health Research Institute
- Women's College Hospital Research Institute
- Institute for Better Health (Trillium Health Partners)
- North York General Hospital
- Michael Garron Hospital

3.0 Phases

The FoM will employ a **4-phased** approach to restarting research. This phased approach allows the Faculty to scale back research activities should changes in city or provincial guidelines, University operations, or COVID-19 cases and projections dictate that it do so. **All research restarting under Phases 1, 2 and 3, as outlined below, requires the approval of the Dean of the Faculty of Medicine, or delegate, following the attestation of the relevant department chairs regarding individual PI plans.** Note: The phases and percentages described below align with those established by TAHSNr.

PHASE 0 – Current State - Critical Exemptions Only

~5% of on-site pre-COVID capacity at any point in time.

- Active research limited to exempted projects authorized as critical by the University (*e.g.* COVID-19-related; necessary maintenance of animal lines).
- Roughly 60 exempted projects, comprising ~5% normal research occupancy capacity, are currently active within FoM in MSB, CCBR and MaRS. Only personnel listed on these critical projects—or those employed by core facilities & services required to support these projects— are permitted to come to campus.

Phase 0 will be maintained until the University modifies its current policy: "Only those research labs that have been exempted by the University are permitted to operate on-site (I.e. those conducting critical COVID-19 related research or other time-sensitive critical projects," as established in PDAD&C Memoranda #66*.*

PHASE 1 – Restarting Research

Not to exceed ~20% of pre-COVID on-site occupancy at any point in time.

- Active research will be limited to that which can be feasibly conducted under all applicable guidelines and restrictions (as described in Section 4.0). This will likely represent no more than approximately 20% of normal research capacity, although the extent of return to work, within this limit, is at the discretion of the PIs.
- All PIs will submit the Research Restart Registration Form (R^3 Form) on Microsoft Forms. This information will be used to confirm PI attestations, collect numbers of personnel returning to campus, and track the demands on core facilities and support services.

PHASE 2 – Increased Research Activities

Not to exceed ~40% of pre-COVID on-site occupancy at any point in time.

- Building on Phase 1, active research will continue to ramp up to approximately 40% of normal research capacity, although the extent of return to work, within this limit, is at the discretion of the PIs, subject to public health guidelines in effect.
- Physical distancing and other measures will continue, as outlined in Phase 1. Labs that are non-compliant may face restrictions.

PHASE 3 – The New Normal

Not to exceed ~60% of pre-COVID on-site occupancy at any point in time.

- Phase 3 reflects the "new normal" while COVID-19 remains a community health risk. **It will effectively allow research to run at full capacity** but, in practice, day-to-day occupancy will be reduced by 40% as people continue to work from home whenever possible and schedule staggered hours on FoM premises.
- All Phase 1 and 2 protocols will remain in place unless changes to government and institutional guidelines allow the FoM to adjust protocols accordingly. Physical distancing and other measures will continue as outlined in Phase 1 and 2. Labs that are non-compliant may face restrictions.

4.0 Directives and Protocols for Health & Safety

Should anyone be advised by public health authority that they have tested positive for COVID-19, they must contact ehs.occhealth@utoronto.ca immediately. Personal health information and COVID-19 status must not be shared by messaging directly to faculty, staff or others.

Please see Provost's PDAD&C Memo #53: https://memos.provost.utoronto.ca/covid-19-public-health-process-at-the-university-of-toronto-pdadc-53/.

For all directives and protocols:

- Principal Investigators (PIs) are accountable for compliance by all research staff and students within their respective individual laboratories. PIs should direct staff to Human Resources for any formal accommodation requests related to COVID-19.
- Department Chairs are accountable for the compliance of their respective PIs and for the shared spaces allocated to their unit.
- The Dean is accountable for compliance by Departments, and for all public, core facility, and shared spaces not allocated to Departments.

4.1 ALL PERSONNEL MUST WORK FROM HOME WHENEVER POSSIBLE

Individuals will only come to campus when the nature of the work absolutely requires them to do so, and should vacate the premises as soon as the essential on-site work is completed.

4.2 ALL ON-CAMPUS PERSONNEL MUST MAINTAIN 2 METRES OF DISTANCE IN ALL POSSIBLE CIRCUMSTANCES

If the nature of research work or the configuration of a particular lab makes it impossible to maintain 2-metre distance at all times, a medical face mask must be worn. In non-lab spaces where 2-metre distance cannot be maintained, a non-medical mask may be worn. Contact EHS for further guidance.

Masks procured by individuals, for use outside of research spaces, are not to be used while working in the laboratory.

Most public corridors are wide enough for occupants to pass each other *single file* at the far opposite sides of the corridor, and thus do not require use of medical face masks. Careful attention will be paid to total building occupancy and to potential issues related to bottlenecks in busy locations such as lab entrances.

4.2.a) Laboratories: PIs must limit the number of individuals in their labs to constantly maintain 2-metre distancing between them. PIs are encouraged to implement rotating schedules. The Task Group recommends recurring personnel groups ("pods") to minimize the number of potential exposures should a member become COVID-19-positive. **Should anyone be advised by public health authority that they have tested positive for COVID-19, they must contact ehs.occhealth@utoronto.ca immediately. Personal health information and COVID-19 status must not be shared.**

At benches, lab personnel must face the same direction and must not sit across from one another. People should stay as far away from fume hoods as possible, as aerosolized particles drawn into this space could present a risk. Furthermore, fume hood sashes must remain closed when the fume hood is not in use. See **Lab Occupancy Diagrams (appendices)** for examples of how to coordinate personnel within a lab space.

Many on-campus specialty spaces (*e.g.* tissue culture and microscopy) are small and will have maximum occupancy of 1 person at a time.

4.2.b) Shared/Collaborative Spaces: will be used *only* for personnel to eat meals brought from home that do not require heating. The absolute minimum of shared spaces will remain open, e.g. one shared space per Department or per floor, as applicable.

All research personnel will collectively need to increase diligence and sterilize common or shared elements such as printers, photocopiers etc.

The MSB lounge (Rm. 2322) will be off-limits. Signage and tape will instruct people not to enter. The open MSB cafeteria space will be available for use, with a limit of one person per table and the tables spaced six feet apart. There will be no microwave ovens available for reheating food. The CCBR Red, Black and White

Meeting Rooms will be off- limits and locked.

4.2.c) Washrooms: will have a maximum occupancy of 1 person at a time. Occupancy indicators will be placed on the floor outside each washroom. An occupancy indicator is: 1) a small square area of the floor marked with green painter's tape and 2) a pylon. Signage will instruct entrants to indicate the washroom as "occupied" by moving the pylon into the marked square area *with their foot*; upon exiting, they will indicate "unoccupied" by moving the pylon back out of the marked area (see Washroom Occupancy plan; Appendix F).

Where occupancy indicators are not feasible (*e.g.* insufficient space), signage will instruct entrants to "knock and talk" before entering: confirming verbally that the facility is vacant.

Signage inside the washroom will instruct occupants to wash their hands before exiting and to use paper towel to touch the door handle; waste bins will be placed outside the bathroom to dispose of paper towels. The use of all hand dryers will be prohibited to reduce droplet dispersal; sufficient supply of paper towels will be provided.

4.2.d) Elevators: will have a maximum occupancy dependent on elevator size. Signage will indicate the occupant limit for each elevator, encourage people to take the stairs whenever possible, and establish that elevator priority will be given to those with mobility issues. Signage and floor markings will indicate appropriate physical distancing while in the elevator. Floor markings spaced 2 metres apart will indicate where people are to line up while waiting for elevators.

Capacities for MSB and CCBR passenger elevators:

- MSB main passenger elevators by the Memorial Lobby (Queen's Park entrance) - Elevator cabs are 7'-6" wide by 5' deep. So, **2** persons maximum on opposite sides. S t a n d i n g d iagonally will increase the separation.
- CCBR main passenger elevators at the CCBR lobby (College St entrance) - Elevator cabs are 6-8" wide x 5'-6" deep. **2** persons maximum on the sides or diagonally.

Evaluation of elevators is currently underway regarding the other three research buildings.

Capacities for MSB and CCBR freight/service elevators (Note - signage will instruct occupants that these elevators are not to be used except by necessary MedStore, DCM, and other appropriate staff):

- MSB service elevators near the west wing - Elevator cabs are 5' wide and 7'-6" deep. So, **2** persons maximum, diagonally. Should the person at the rear exit first, they will briefly be within the 6' social distancing requirement; masks should be worn in these elevators when 2 are in it.

- MSB freight elevator (behind the passenger elevators) - 6'-6" x 7'-11". So, **4** persons maximum, in each corner.

- CCBR freight elevator (behind washrooms) - 5'-8" wide by 8'-6" deep. So, **2** persons maximum, diagonally, wearing masks as the 6' cannot be ensured when passing in the elevator.

4.2.e) Stairwells: in MSB, each stairwell will be dedicated for exclusive "up" or "down" day-to-day usage.

Signage (on walls, on stairs) at each stairwell will indicate the designated direction. In the event of a fire alarm, all stairwells remain accessible for exiting.

4.2.f) Deliveries: All deliveries will be received at MedStore and research personnel will go to MedStore to pick up their items; **no deliveries will be brought directly to labs**.

4.2.g) Loading Docks: Only MedStore staff will have fob access to the two loading dock access doors - MSB and CCBR. Anyone else needing access to the docks will require permission, and coordinate with MedStore staff – process for this exception is under development.

4.2.h) Human Research Participants: No human research subjects will enter FoM premises, unless under express written approval from the Vice Dean, Research and Innovation, in accordance with REB protocols.

4.3 RESEARCH BUILDINGS WILL BE OPEN 7 DAYS A WEEK, AS USUAL

This allows for increased capacity while observing staggered occupancy to adhere to spacing protocols. PIs must be aware of who is in their respective labs for the entire extended period, through lab schedules or other communication mechanisms**.**

Personnel must adhere to all FoM protocols regardless of time of day. Personnel, when occupying facilities after regular scheduled hours (*i.e.* 7pm to 7am), may often be alone and must adhere to the University's Working Alone Guidelines.

4.4 CLEANING & STERILIZATION

4.4.a) Supplemental Cleaning Services: To minimize risk of infection, the FoM will work with the central Office of Property Services and Sustainability to determine the appropriate level of supplemental cleaning required.

4.4.b) Sterilizing lab equipment: Research personnel are responsible for sterilization

of equipment and surfaces in their respective labs.

The PIs' lab-specific plans will include assigning laboratory staff who are on-site with responsibility for regular wipe down of common surfaces/equipment using 70% ethanol or recommended disinfectant. In general, every time a piece of common equipment is used, it should be wiped down. These areas include but are not limited to incubator handles, BSC/fume hood glass, keyboards, microscopes, centrifuges, *etc.* Signage will be posted reminding staff to wipe down areas.

4.4.c) Sanitizers and Dispensers: D i spensing sanitizers will be placed at entrances, washrooms, and elevators where there is not currently a wall-mounted unit.

4.4.d) Waste Management: Environmental Protection Services, which disposes of hazardous waste from labs, currently runs on a skeleton crew and checks only labs that have been approved to operate during the shutdown on a reduced schedule.

4.5 ENTRANCES AND EXITS WILL BE LIMITED TO THE ABSOLUTE MINIMUM NECESSARY AND SIGN-IN STAFF PLACED AT EACH ENTRANCE

Entrances will be restricted to specific approved entrances with fob access and sign-in. Personnel will exit through designated exits, except in the event of fire alarms.

All entrants will sign in. Sign-in staff will check names from a pre-scheduled list.If lineups for entry/exit occur, sign-in staff will ensure compliant distancing.

Sign-in staff will be scheduled to work from 7am-7pm, 7 days per week. After-hours entrants must sign-in and sign-out manually with pen & paper.

Occupants will exit via the appropriate exit doors.

4.6 UNIVERSITY ANCILLARY SERVICES: Parking and Food Services

As of May 11, the University no longer centrally pays the parking charges for essential on-site personnel who've been using the temporary "*On COVID-19 assignment*" parking passes. Units now have the option of paying for essential staff's parking charges directly to U of T Transportation, should they wish.

St. George Food Services (i.*e.* MSB cafeteria, Starbucks, and Tim Hortons) will remain closed.

5.0 Implementation

5.1 DOCUMENTS, RESOURCES, AND EDUCATION

All institutional resources will be available on the Faculty Research & Innovation webpage.

5.2 ONGOING WORK

The Faculty will continue to monitor activities, including but not limited to:

- In conjunction with the University, evaluating the appropriate method for acquisition and distribution of PPE, namely medical face masks.
- Determining the specific needs for dedicated sign-in staff at each entrance/exit across our 5 different buildings (see Section 4.5: Entrances and Exits).

AFMC Return to Research Guidelines

(Final Board approval April 29 2020)

Guidelines

1. **Faculty, Staff and Research Trainee safety is paramount.**
2. **The COVID-19 environment must be stable and decreasing in prevalence and any decisions should be in compliance with Federal and Provincial Public Health Guidelines.**
3. **Faculty, Staff and Research Trainees should remain off-site unless actively conducting research.**
4. **Faculty and Departments can shut down laboratories, floors or buildings as required.**
5. **Faculties will work collaboratively with their VP Research to oversee re-opening research.**

Parameters for re-opening and sustaining open University Research Programs in time of COVID-19

1. **Sustained low prevalence or declining COVID-19 prevalence in the community.**
   Rationale – defines a state where COVID-19 is no longer a spreading epidemic

2. **Daily screen for risk exposure review, symptoms, and temperature check prior to going on site.**
   Rationale – allows one to screen for active infection in a person
   Strategies include:
   i) Self-monitoring at home and daily log
   ii) Limit access point for building access – Individuals screened for risk exposure, symptoms +/- temperature at point of entry with power to deny entry

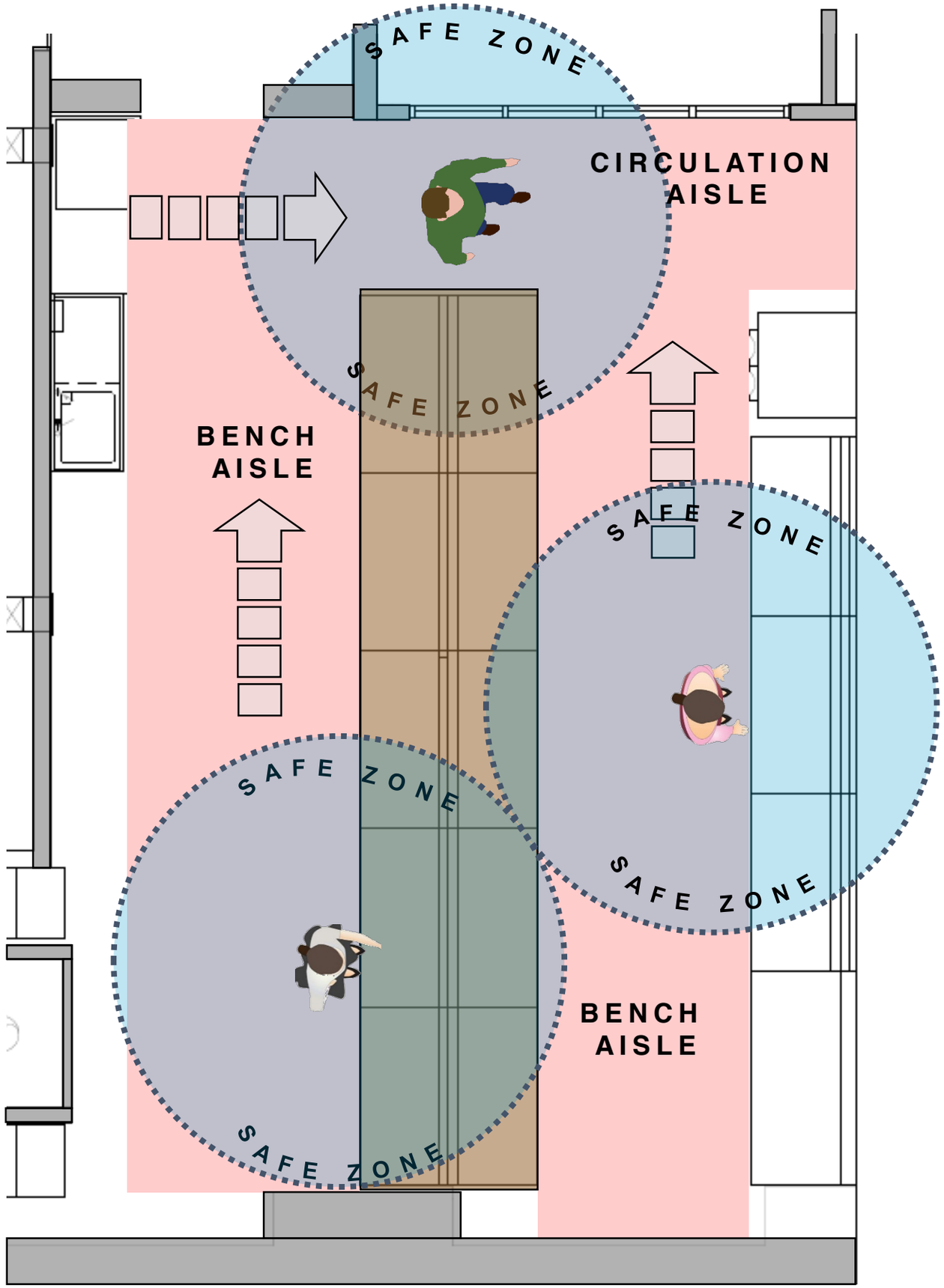
3. **Rapid availability (i.e. <24hours) COVID-19 testing on risk exposed or symptomatic people**
   Rationale – allows one to r/o active infection in a person (i.e. assumes system capacity)

4. **Minimize or eliminate COVID-19 exposure to and from the work environment**
   Rationale – allows one to avoid contaminating both home and work environments
   Strategies include:
   i) Minimizing public transit and car pooling
   ii) PPE – even self-made masks.

5. **Maintain a COVID-19 free environment in offices and laboratories**
   Rationale – need to have all faculty, staff, research trainees and research environments to be reliably COVID-19 free *Strategies include*:
   i) Physical distancing and regular hand washing
   ii) Staggered staff at work (i.e. if not in lab should be off campus)
   iii) Limiting who can be in lunch space at a given time to ensure physical distancing
   iv) Wiping down surfaces before and after use (i.e. lunchroom, conference room, lab bench).

6. **Personal Protective Equipment (PPE) use in the offices and laboratories as recommended by Public Health Guidelines.**

SOCIAL DISTANCING IN LABS:
ONE ENTRY LAB BENCH AISLE (DEAD END)
MSB, MARS,CCBR



Notes:

1) **Maintain 2m (6') social distancing**
2) **Offset activities from aisle to aisle**
3) **Two way circulation zones: keep right**
4) **Stay in bench aisle when person is moving in circulation aisle**
5) **Fume hood sashes to remain closed unless in use**

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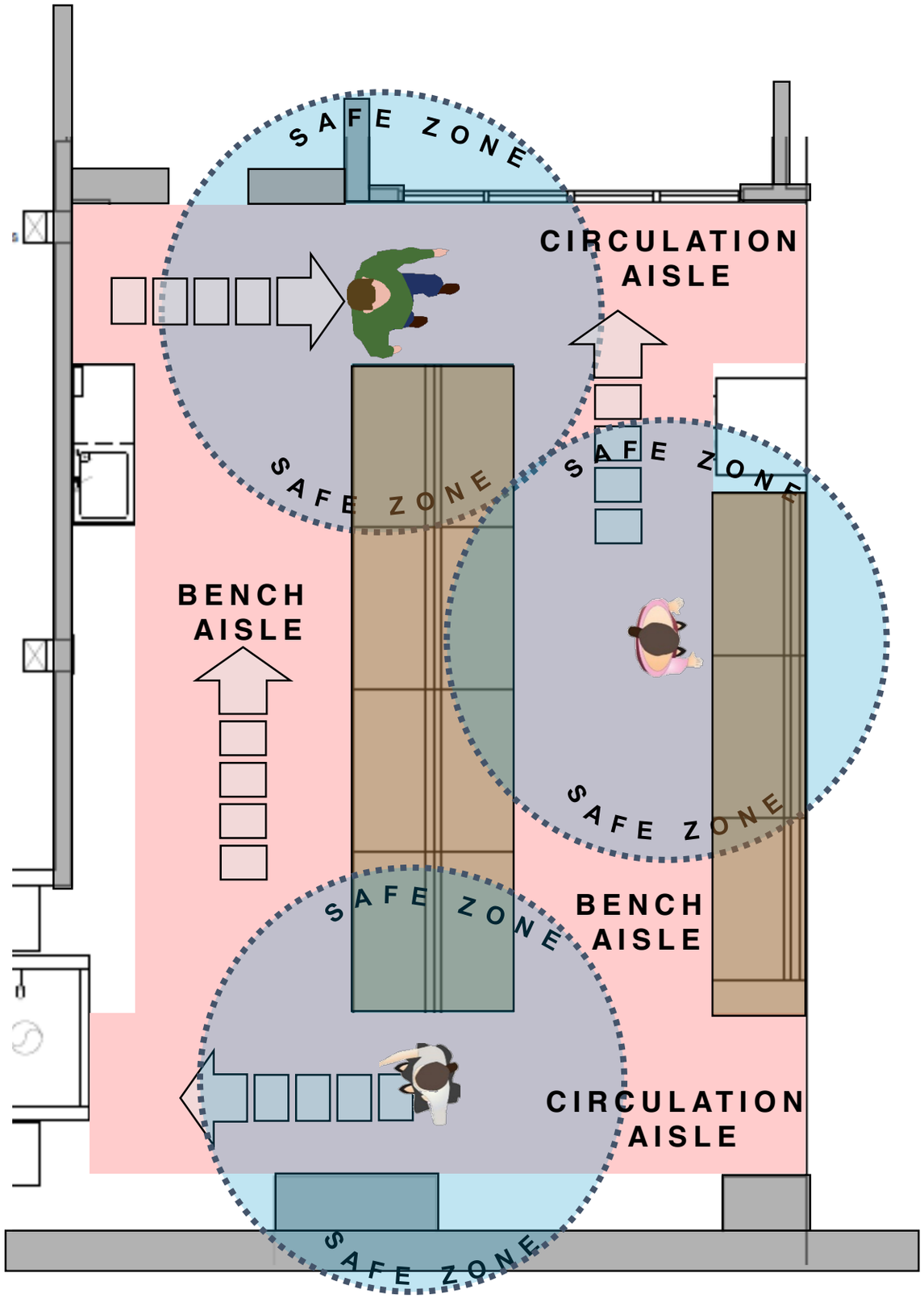
SOCIAL DISTANCING IN LABS:
TWO ENTRY LAB BENCH AISLE



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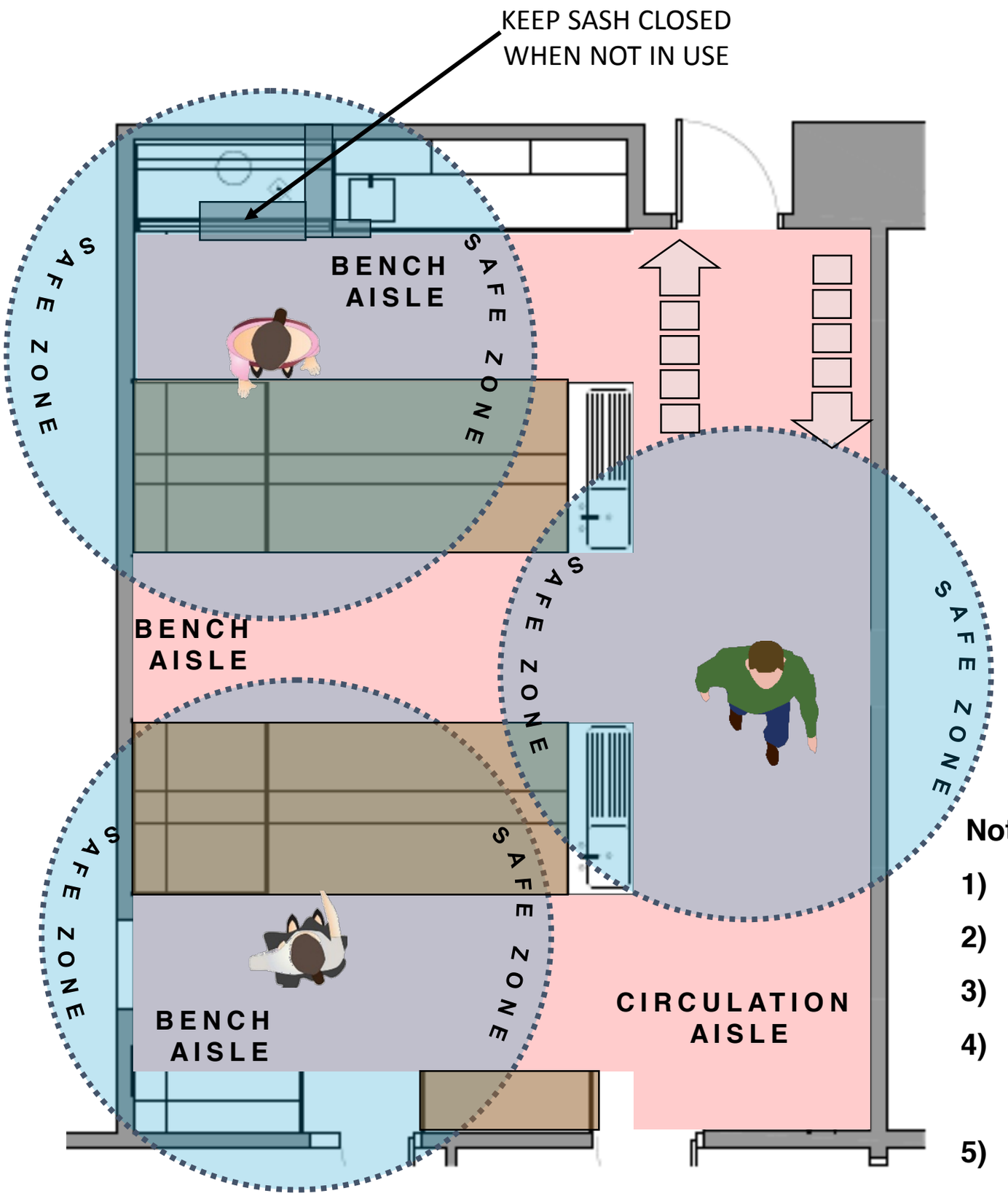
SOCIAL DISTANCING IN LABS: SINGLE ENTRY BENCH AISLE



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Signage
Reinforcing maximum occupancy; instructions.

UNOCCUPIED
The pylon is not inside the square taped on the ground.

Signage
Reinforcing maximum occupancy; instructions.

OCCUPIED
The pylon is inside the square taped on the ground.

UNIVERSITY OF TORONTO
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This washroom has a single occupancy maximum.

Please move the pylon *with your foot* to indicate when the facility is in use.

VACANT	OCCUPIED