



BioEngineering: Building access and usage procedure in the time of Covid-19 STANDARD OPERATING PROCEDURE

Type of SOP: Process Hazardous Chemical Hazard Class

Date of last revision to SOP: June 12, 2020

Contact: please contact the BioE building committee with concerns or questions about this SOP

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OVERVIEW

Initially after the onset of the Covid-19 pandemic, all labs were closed only allowing essential workers access to maintain critical lab functions. This SOP describes requirements and procedures for partially opened labs allowing access to select researchers to resume some lab activity. This is termed “Phase 3” which was defined as 10-25% activity with 5-15% of normal personnel. Our goal in the Bioengineering building is to maintain at least 250 s.f. per worker and 12’ radius at all times.

Phase 3 research personnel density estimates:

Experimental PIs:	10
Unique lab researchers:	61
TOTAL personnel:	71

Phase 3 maximum simultaneous researcher density:	30
<10% of BioE fully populated density:	335

Based on:

lab stations:	140
researcher office seats:	164
staff office seats:	19
faculty office seats:	12

Daily Conditions for Lab Entry

Preconditions:

- Lab access is by scheduled appointment using the scheduling calendar for each lab and only from 6AM-midnight daily.
- Access will be provided only for researchers who already have completed lab safety training, have reviewed the “Covid-19 Safety training” slides from the office of research, have reviewed all relevant Covid-associated SOPs (including this document), and have a card-key and whose lab has an approved Lab SOP.
- Access to the building is only permitted for lab work or essential office work
 - All work that can be done remotely, should be done remotely (this includes PIs and staff)
 - No in-person meetings are permitted inside the building
- For each day that a worker will enter the building, s/he must complete the UCSB ‘Wellness Survey’, which will be emailed to building personnel on a regular basis, but also can be accessed here (LINK TO BE ADDED). Generally, the survey will act as an attestation that the worker, on the day in question, has no fever, nor other symptoms of COVID19, as well as directing the user to contact their supervisor, and giving advice on health resources, if any

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symptoms are present. If symptom free, the user will receive an email indicating building access is granted.

- Note that workers are expected to check for fever at home, prior to coming to the building. Thermometers for home use can be requested from the building committee. A very limited number of disposable thermometers (in case home checking was forgotten) is available in the 1st floor west-side kitchen
- For a list of Covid19 symptoms, and a 'self-checker' app, refer to the CDC "Symptoms of Coronavirus" webpage:

<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

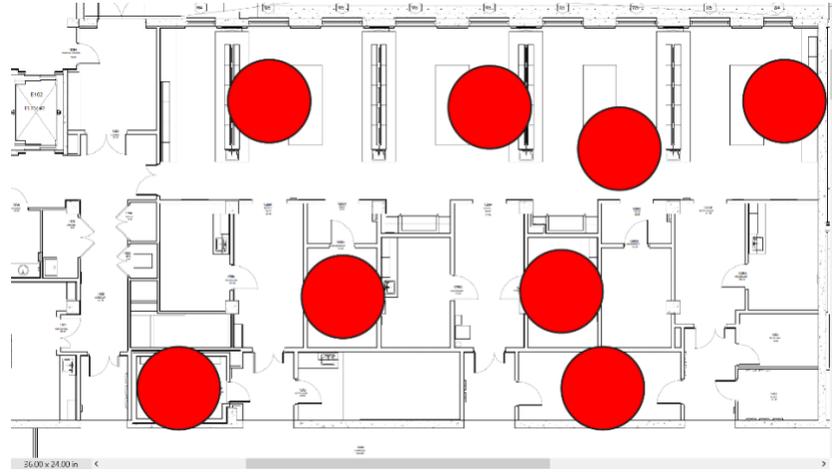
- Workers shall coordinate lab access approval from their PI. PIs will coordinate priorities within the phase-3 density targets, i.e., 1-3 workers per group at a time depending on the lab layout. Workers shall access the building only when permitted by the PI, and leave by the agreed-upon time.

Scheduling Guidelines & Personnel Density

- For the current occupancy and distribution of lab groups in the lab spaces and south-side offices, our target for Phase 3 is maximum occupancy of 30 across all the lab spaces/south offices on floors 1, 2, 3. Floor by floor targets are approximately 10 people on floor 1, 12 on floor 2, and 6 on floor 3.
- The maximum simultaneous occupancy of the ~2500 square-foot shared wet lab space on each floor is 5 people (roughly 1 every-other bay, giving a density in the shared space of 1 per 500 square feet)
- Only 1 person at a time can be in any of the side lab rooms (a.k.a. procedure, specimen, microscope rooms)
- Workers will strive to maintain at least a 12 foot spacing between each other as they move around the lab
- Avoid working across a lab bench (~6 feet across) from a worker from a different group. Each group is responsible for moving equipment such that the majority of tasks happen on benches that do not border other labs, and/or installing plastic sheeting to minimize aerosol contact across lab benches
- To use any shared workspaces (autoclaves, cold rooms, tissue culture rooms), researchers will schedule a time using the relevant calendar for that space, and follow SOPs for that space
- Cold rooms carry extra risk, as the low temperature and lack of ventilation increases transmission possibility. Scheduling of those rooms includes unused time between successive personnel entry; see the cold-room SOP for details
- South-side (student/post-doc) joint/open-plan offices should generally not be used; note they have worse ventilation than lab spaces. If utilized for a break by one of the allowed labworkers, only 1 person may occupy a joint office at a time, and s/he must take care to clean all touch points before and after using the space
- Low density lab occupancy is inherently riskier. If workers are in the lab space alone, they are expected to use a 'buddy' – someone who knows where they are and who can check regularly on status. Researchers should follow individual PI SOPs regarding all safety procedures.

This layout of the 1st floor lab space demonstrates example dispersion for 8 workers in the main lab and side rooms, e.g., 4 in the shared wet lab (approx. 1 person per 600 sq ft, top part of diagram) and 4 others in separate side rooms. The red circles are 12 foot diameter; the goal is for the workers to move about the floor without having their circles overlap.

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Building Traffic Flow Follow Rules:

ENTRY POINTS

- The west-side door and east-atrium door are entry-only
- All entry doors should be opened using your foot and the ADA door-opener
- All lab workers will enter the building through the west-side doorway, use the west-side 1st floor kitchen to carry out the entry procedure (see below), and use the west-side staircase to ascend to their floor
- All staff/faculty will enter the building through the east atrium doorway, use the atrium station to carry out the entry procedure, and use the atrium staircase to ascend to their floor

MOVEMENT WITHIN BUILDING

- All personnel will stay on their floor as much as possible
- The atrium and west-side staircases will be predominantly upgoing-only.
- Foot traffic in hallways on the lab floor will predominantly flow to the east. Foot traffic in atrium corridors will predominantly flow counter-clockwise (viewed from above)
- Avoid using the elevator (a small, poorly-ventilated space) unless necessary

EXIT FROM BUILDING

- The north door and south atrium door are exit-only
- The south atrium door can be opened from the inside with your foot and the ADA door-opener
- All 3rd floor lab and office workers will exit through the north-central staircase, and north door
- 2nd floor office workers will exit through the north-central staircase and north door
- 2nd floor lab workers will exit through the patio (2nd floor south side of atrium, around to external staircase)
- 1st floor lab and office workers will exit through the south atrium door

NOTE: The above rules will be adjusted if and when classes or other events begin to take place in the auditorium. This SOP will be re-written when that happens; however, the goal will be to avoid the atrium entirely, with everyone entering the west-side door, and exiting the north door.

The diagram on the next page clarifies the building exit/entry point procedure

EMERGENCY EXIT PROCEDURE

In case of emergency or fire alarm, exit the building in safest route possible in accordance with standard exit procedure. That is, ignore the restrictions discussed in the prior paragraph.

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TRASH PICKUP AND CUSTODIAL SERVICES

- Trash bins should be located in the hallway outside of the main lab and only these bins will be emptied by custodial services. Any trash generated in the labs or offices should be emptied into these bins.
- Restrooms and door handles on all floors will be serviced and cleaned daily, but custodial services will not be entering or cleaning offices or lab spaces.

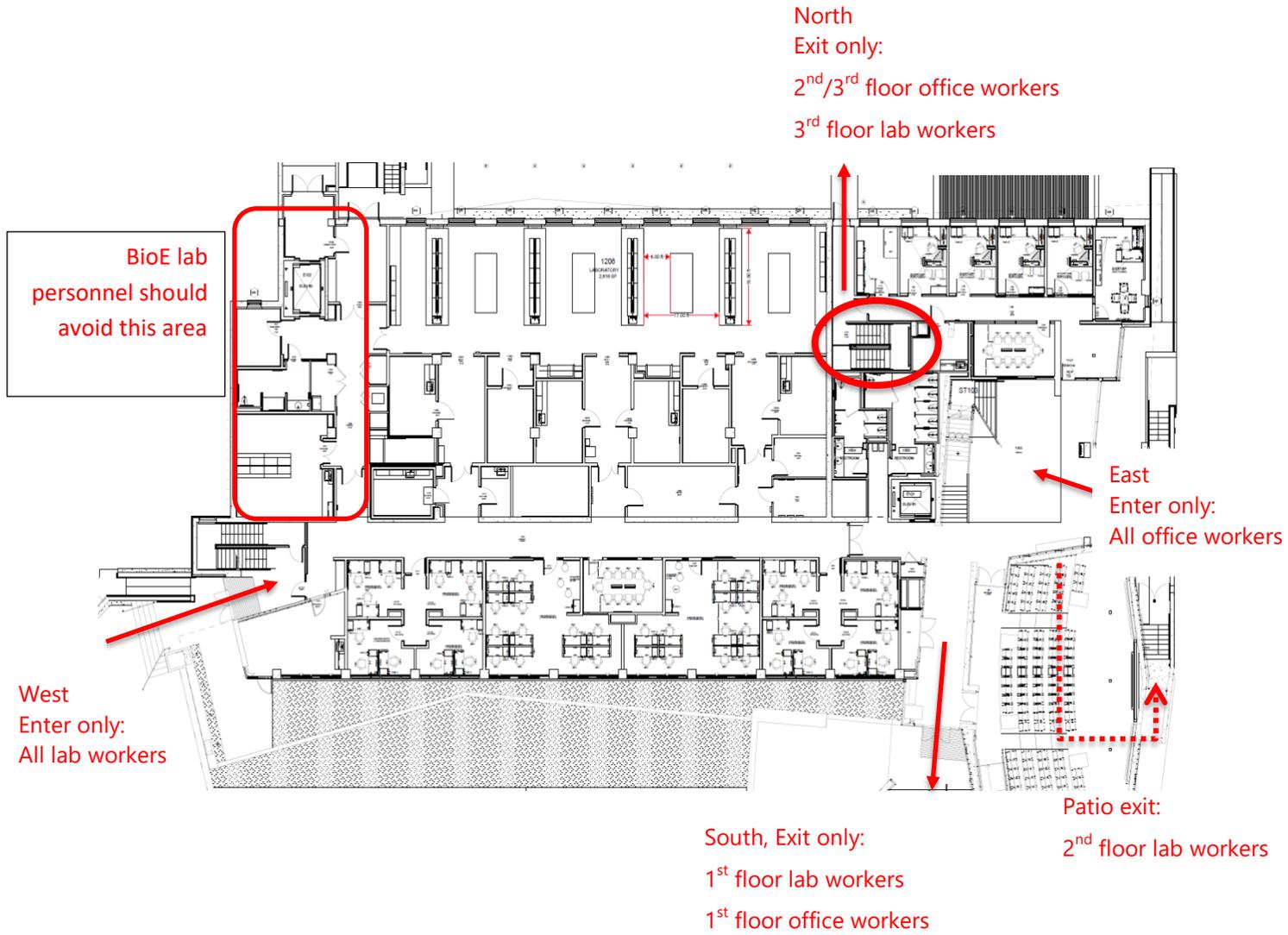
Limit access to loading dock, first floor freight elevator, and west corridor (near Room 1301):

These spaces should be avoided as much as possible, as both the ARC facility, and, particularly, the on-campus COVID19 testing effort, make frequent use of them, thus there is a high personnel density in those areas. Personnel associated with the COVID19 testing will generally use the loading dock for entry/exit.

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Bioengineering Building Exit/Entry Points





PPE/Safety Equipment:

- All personnel will wear a face covering at all times within the building, with the only exceptions being for an office worker when sitting in a single-person office, or a lab worker when undertaking a process for which a face covering would be dangerous (as indicated in individual PI SOPs)
- It is suggested that building personnel use a face covering inside the building different from the one used outside, and that they change to a fresh face covering every 3-4 hours
- Personnel must wash their own face covering at home between usage
- Lab workers should strive not to touch door handles with hands; door handles should be cleaned if directly handled
- Other PPE will be worn and maintained as indicated in individual PI SOPs

Building and Lab Entry

Initial Entry Procedures:

- Follow campus guidelines regarding face coverings outside of the building
- Upon entering the building: Proceed to west-side 1st-floor kitchen to wash hands (using sanitizer is also possible, but washing hands is more effective and preferred). Perform wellness survey if not done previously (note the presence of extra disposable thermometers in the kitchen). It is suggested that workers switch to their workplace mask in the kitchen, but this can also be done upon arrival at the workspace.
- Proceed to workspace (taking care regarding handling of door handles, railings, etc), and don workplace mask (if not already done), gloves, and any other PPE needed for labwork.
- Clean and disinfect workstation upon arrival, and all other surfaces (doorknobs, light switches, keypads) that are used. Follow CDC cleaning procedures (typically involving first cleaning with a cleanser or soap/water solution, then disinfecting with, e.g., an alcohol or bleach solution): <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html>
A full list of EPA-recommended disinfectants for COVID19 can be found here: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>
- After sanitizing the workspace, wash hands thoroughly with soap and warm water and change gloves.
- Change your gloves and wash your hands regularly throughout your work and again before exiting

Bathroom procedure

- 1 person in a bathroom at a time
- When entering the bathroom, check the time of last entry; try to wait 10 minutes between occupancies.
- Flip the sign to 'occupied' upon entering
- Do not use the air dryers, just the paper towels
- When leaving the bathroom, flip the sign to unoccupied *and* write your exit time on the white board



Phase 3 Specific Lab Use

Lab Usage:

- Working procedures for each individual PI lab and shared workspace are listed in the relevant SOPs

Lab Exit

End of Use Procedures:

- Wipe down all touched surfaces with disinfectant, remove and store laboratory specific SOP as per laboratory SOP.
- Dispose of gloves, wash hands.
- Exit building, taking care regarding handling of door handles, railings, etc.

Tracking procedures

- Building and lab entry card usage will be used, along with schedules about individual PI rotations, to track people and to assist the campus response; if the QR code system is mandated and installed, that will be used (not present at the time of writing of this SOP)
- Entry cards usage will be used to track all UCSB individuals, not just lab personnel; this includes (but is not limited to): Delivery personnel, facilities maintenance personnel, and external maintenance personnel
- In the case external personnel without key-card access need building access (e.g. UCSB personnel that are not BioE personnel, or those completely external to UCSB): There must be a BioE PI who acts as the 'host' of that personnel and lets them in the building. That host PI is responsible for enforcing entry/exit times of the external personnel, for insuring they complete the wellness survey (if from UCSB) or an equivalent health attestation, for insuring they have been trained for building COVID19 procedures and all other relevant lab safety procedures, and that the external personnel do not exceed the allowable number of people in the building. It is suggested that other labs on the relevant floor are alerted to the presence of external personnel
- In case of a positive case in the building, tracking information will be used to identify those deemed at risk, who will quarantine following campus/county guidelines
- Workspaces used by an infected individual will be cleaned following CDC guidelines: <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/cleaning-disinfection.html#Cleaning>
Briefly: the workspace should be left unused for one day, if that is viable. Then, it should be cleaned with soap and water, followed by disinfection. See prior instructions for cleaning and disinfecting procedure.

Additional Phase 3 Safety Procedures

- Package room access: BioE 2001 will be used for all shipping and receiving operations, the a refrigerator will be relocated there for perishable items
- Labs should designate one representative each day to check BioE 2001 for packages

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Notes:

- The BioE building committee reserves the right to disable card key access from workers who do not follow the rules listed here
- Workers are encouraged to take breaks outside, e.g. on the patio