

## Materials Research Lab Access STANDARD OPERATING PROCEDURE

Type of SOP:	_ Process	_	Hazard Class
Date of last revision to SOP: 6/13/2020 09:48 (A. Strom)			

#### **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 means 10-25% activity with 5-15% of normal personnel. The *Critical Research Staff* identified in March to attend to critical maintenance tasks during the research shut down will continue to have access to those defined spaces. List of critical maintenance tasks and personnel attached.

Average Occupancy MRL: Unique users over 6-month period (pre-Covid) 237 unique researchers accessed all first-floor labs 199 unique researchers accessed MRL shared analytical facilities 15% (237) = 35 unique individuals for Stage 3 access

Based on the average occupancy of the first floor MRL labs 35 unique researchers can be safely approved for access to the MRL first floor labs. While 35 total researchers total will be approved for access, in practice, there will only be about 15 - 20 in the building at one time and one Department Safety Rep (DSR). The maximum permissible occupancy by square footage of lab space is 30-35 people using the guideline of 1 person/250 ft<sub>2</sub>.

The MRL is designating two unique types of researcher access for the purposes of this building plan: 1) Shared Facility or SF; and 2) Lab+SF. The 21 Lab+SF researchers will have access to all the shared synthesis and analytical facilities as well as their own individual PI labs (Clement, Hawker, Safinya, Seshadri) on the MRL first floor. These Lab+SF researchers will also act as Superusers in the shared analytical labs to help support the needs of researchers that don't have in-person access. In contrast, the 14 SF researchers will only have access to the rooms with the equipment they use. About half of the SF researchers will only enter the Low Temperature Lab (see building schematic). They are isolated from the rest of the building by a separate service entrance directly into the lab. Also, many SF researchers will only be in the labs for about 20 mins to load a sample for experiments that may last days or weeks. All instrument control and data transfer can be handled remotely. The 35 researchers that are given approval to use the building will not exceed the room occupancy limits, using the square footage guideline for 1 person/250 ft<sub>2</sub>. Typical occupancy of the building will not exceed about 21 people.

Daily Conditions for Lab Entry Preconditions:



- Access only for approved researchers who already have completed general lab safety training and have approved card key access.
- Have documented Building and Lab SOP training and the EH&S Covid-Specific safety training. (link)
- Do not use anyone else's card or let anyone else use your Access care to get in. This is important for contact tracing if necessary.
- Prior to entering the building, approved researchers will complete a Zoom orientation with a DSR.
- Prior to daily work, complete daily Health Attestation Survey. link
- Notify PI of illness and/or Covid exposure, PI's to inform Building Committee, Building Committee will inform occupants. Follow CDC and SB County guidance for what to do if you are sick or exposed. SB Co: What To Do if You Get Sick CDC: How do I know if I should quarantine?
- Approved researchers will get initial lab schedule approval from Pls, who will coordinate
  priorities. Once approved by the Pl, the researcher will schedule specific lab time in
  coordination with the MRL DSRs, Amanda Strom and Rachel Behrens, the prior week.
- Building access for researchers is Monday Friday, 8 5 pm. Access hours will be expanded once we have vetted our plans.
- DSRs and lab managers have the authority to revoke access based on safety concerns.

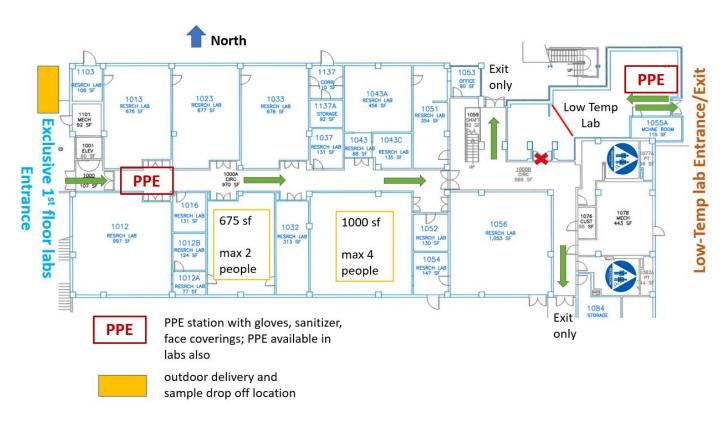
# Scheduling Guidelines & Personnel Density Specify Lab Time:

- Schedules of proposed work in all MRL labs will be scheduled the prior week on Wednesday for approval by the MRL DSRs (Amanda Strom and Rachel Behrens) through an online booking system or Google calendar.
- Researchers should come to the building only long enough to complete their task. Office and kitchen use is not permitted for Stage 3. None of that space has been evaluated by EH&S.
- Simultaneous occupancy greater than 2 people within any enclosed space is not permitted in the initial weeks of Stage 3 reopening, regardless of square footage.
- The second and third floor offices will remain closed for Stage 3, except the MRL Staff on Duty, but on the rare occasions when staff need to go in, they sign in to Google Calendar, "MRL 2<sub>nd</sub> Floor" and "MRL 3<sub>rd</sub> Floor" and select a reservation date along with a time block and enter room number and name.
- Eating spaces and gathering spaces are all closed.
- Reference Lab SOP for procedures regarding use of PPE within laboratory and handling of chemicals and other hazards.
- We will coordinate with FM/PF on public area cleaning schedules and access to building
  for maintenance to satisfy maximum occupancy restrictions and not to coincide with
  shift changes in the building. We intend to use the university QR system for contact
  tracing.



# Building Traffic Flow Follow Rules:

- Hallways will be predominately one-way. The exception may be for going short distances.
  Look down the hallway when exiting the lab and yield to anyone who may already be
  walking there. The goal is to minimize exposure and to avoid people passing each other
  in close quarters. Use common sense.
- Obey signs indicating PPE requirements, traffic flow and personal space requirements.
- In case of emergency or fire alarm, exit the building in safest route possible in accordance with standard exit procedure.



#### **PPE/Safety Equipment:**

- Shared analytical labs and all public spaces will require face coverings at all times.
   Disposable face coverings/masks will be available. Fabric face covering will be provided to approved researchers by EH&S. If users wear their own mask or face covering in SFs, they should be approved by the manager.
- In PI labs users should wear the mask or face covering specified in their Lab SOP.
   Chemical and synthesis labs may require process-specific masks such as flame-retardant.
- Disposable Gloves
- Safety glasses or face shield or goggles (depending on hazards). Users should not share PPE if possible.



- Disinfectant spray/wipes (available at PPE stations in hall)
- Hand sanitizer (available at PPE stations in hall)

# Building and Lab Entry Initial Entry Procedures:

- Wear face covering whenever on campus to and from lab and all public spaces inside the MRL building.
- Prior to entering the building, submit Health Attestation survey.
- Most SF and SF+Lab users will enter the building from one isolated entrance on the west end of the building near the elevator (see schematic). Specified in Lab SOP.
- Low Temp SF users will exclusively enter and exit from the service door at the west end
  of the MRL building directly into lab (see schematic). Specified in Lab SOP.
- Note new occupancy on lab door sign by turning the dial with a pen (see pic below). The
  occupancy sign will indicate the maximum occupancy of the room and how many
  occupants are currently inside (if more than one is permitted).



- In shared facilities, users will note the time the last occupant left on the occupancy sign clock face. The next user should wait for 15 mins for one room air change before entering.
- With gloves, disinfect building door handle as well as laboratory workspace upon initial entry using 70% Isopropanol or 10% bleach solution or disinfecting wipes on the approved list of cleaners per the CDC. Refer to Lab-specific SOP for community items that may need disinfection. This will include faucet handles, light switches, door handles, and any equipment or tools being used (knobs, switches, any touchpoints)
- After sanitizing the workspace, wash hands for 20 seconds with soap and water.
- Only first floor bathrooms are open. Doors to both bathrooms are propped open. Bathroom procedures: 1 person in room at a time with an occupancy sign like the labs.



# Phase 3 Specific Lab Use Lab Usage:

- Reference Laboratory specific SOP
- Follow your lab specific SOP regarding working in labs safely. Check in through the designated method, either a lab buddy or lab manager.
- Perform work efficiently, planning operations one week beforehand. Get approval from PI and DSRs for scheduling conflicts.
- Be cognizant of touching surfaces, avoid touching your face.
- Wash hands frequently for 20 seconds.

#### Lab Exit

#### **End of Use Procedures:**

- Put all your materials away at the end of the day so that if necessary, the space may be cleaned.
- Each Lab SOP will designate what community and/or lab-specific surfaces should be wiped down at the end of a shift, e.g. glove box windows or tools.
- Wipe down all touched surfaces with disinfectant, remove and store laboratory specific SOP as per laboratory SOP.
- If wearing disposable mask, dispose of per Lab SOP.
- Wash hands.
- · Put on dust mask or face covering.
- Turn off lab lights and set "Lab Occupied/In Use" dial to zero. Note time out on Occupancy sign.
- Check out through the labs designated method in the Lab Specific SOP with lab buddy or lab manager.

# Additional Phase 3 Safety Procedures Notes:

- Make every effort to practice social distancing with face covering in hallways and when using the restroom.
- Hazardous processes that require extended time to shut down safety will need approval from Building Committee. <a href="mailto:mrlbuilding@mrl.ucsb.edu">mrlbuilding@mrl.ucsb.edu</a>
- All MRL researchers will have a Zoom link to the MRL Staff on Duty and SF managers and through a communication line like Slack. We will discuss this more at the orientation.
- All approved researchers should carry their own pen and a sharpie.
- Any Admin staff that enter and exit the building will do so from the exterior stairwells on the 2nd and 3rd floor and will be coordinated with the MRL Staff on Duty.
- Deliveries and sample drop off outside building.
- Report safety concerns to the MRL Building Committee mrlbuilding@mrl.ucsb.edu
- Anonymous report line for building or safety concerns. link