The BioSci 2 Research Restart Committee

Rick Dahlquist - MCDB
Erika Eliason - EEMB
Stu Feinstein - NRI
Manny Garcia - ARC
Scott Hodges - EEMB
Bill Smith - MCDB

This document primarily focuses upon space controlled by EEMB, MCDB and NRI in BioSci2; the ARC plan will be described in a separate document owing to the different nature of its operations.

Many thanks to the Department of Chemistry and Biochemistry Research Restart Committee
Steve Buratto, Professor and Chair
Pre-requisites for All BioSci2 Personnel in Stage 3

All personnel must comply with daily health screening requirements:
• **Symptom Screening and Access Monitoring** - document outlining preferred UCSB solutions to symptom screening and access monitoring.

All personnel must complete the following on-line training:
• **Covid-19 Safety Presentation** - good general overview of vectors, PPE use, and engineering controls. Individual labs may supplement this training with their own task-specific safety information.
• **Guideline for Establishing safe research facilities** - useful overview of factors to consider at the lab and building level.
• **Ramp up stage definitions and guidelines** – presents standardized phased restart between UC campuses.

All personnel must comply with the building-specific safety plan for Bio2. This plan covers such processes as building traffic patterns, entry/exit rules, and other safety rules for the building.
Additional Resources

Federal, State and Local /Government Resources

CDC Guidance for Colleges and Universities
CDC Guidance for Cleaning and Disinfection Your Facility
California Dept. for Public Health Guidance for Colleges and Universities
California State Roadmap
California State Industry Guides and Checklists
Santa Barbara County Public Health Guidance
General Considerations

1. The goal is to define a set of protocols, agreed-upon by all researchers, that enable optimal research productivity consistent with both standard laboratory safety practices and minimizing COVID-19 transmission.

2. Many protocols and parameters will be dictated by campus leadership.

3. Since every building has unique requirements we need to establish a set of rules and guidelines that are specific to BioSci2 for everyone’s health and safety.

4. The basic principles of COVID-19 safety are clear: Minimize physical interactions between personnel and be rigorous about cleaning.

5. In order to be fair, we will try to have a uniform set of guidelines. We will respect differences between lab environments and maintain flexibility as much as possible, but many of our safety issues will require building-level decisions that require good compliance by individual PIs/groups.

6. There is a clear message from the Office of Research that this is not a return to business as usual. Sacrifice will be necessary in order to keep everyone as safe as possible and to increase the probability of subsequent additional ramp-ups. The entire building depends on every individual’s full compliance.
Our Primary Goal will be to Minimize Transmission

CONTINUE WORKING FROM HOME IF AT ALL POSSIBLE

IF YOU NEED TO RETURN TO BIOSCI2 TO CONDUCT YOUR RESEARCH, PLEASE KEEP YOUR TIME IN THE BUILDING TO A MINIMUM AND ADHERE TO THE FOLLOWING PROCEDURES:

1. Prior to returning to research
   Review all the required links (See Slide 2).
   Familiarize yourself with the new lab protocols for your lab and any communal/shared facilities that you may use, including new PPE requirements.

2. Prior to coming to work each day
   Fill out the Symptom Screening Survey (you are required to do this daily).
   If you have symptoms, or have been exposed to someone who does, please report this to your PI and a member of the Building Committee (Drs. Dahlquist, Eliason, Feinstein, Garcia, Hodges, W. Smith).

UNDER NO CIRCUMSTANCES MAY YOU COME IN IF YOU DO NOT FEEL WELL!
Our Primary Goal will be to Minimize Transmission

3. Utilize ENTRANCE PROTOCOL and ONE-WAY TRAFFIC FLOW

   Check-in at the North entrance (near the elevators) using access check in protocol
   - Use hand sanitizing station; as a back up, wash hands in rest room
   - Use the staircase adjacent to the elevators to go UP
   - Minimize use of elevator (if you must use the elevator, only one person at a time)

   EXIT at the south exit (back of building; opens to the dorms)
   - Wash or sanitize hands, dispose of gloves/mask
   - Use the stairs on the south of the building to exit;
   - Minimize use of elevator (one person at a time)
   - Sign out on access app

For those on the first floor, an alternative exit is on the North side loading dock
one-way traffic stairwell going up

Alternative Exit

Parking lot

Entrance

one-way traffic stairwell going down

Road & Dorms

Exit
Our Primary Goal will be to Minimize Transmission

4 RESEARCH SAFETY MEASURES for BioSci2

BUILDING ACCESS

Each lab will establish its own work shifts that conform to the maximum number of people allowed in the lab at any given time and suits the needs of the lab. Each lab will maintain a Google Calendar for each room in the laboratory. There will be a minimum of 1 hour between use of laboratory space by different groups of individuals in order to allow for sanitizing of all touch points and ventilation. Each person is responsible for sanitizing lab locations that they use, including communal equipment (keyboards, dials on instruments, etc.)

BUILDING VENTILATION

Most rooms in Bio 2 are single-pass systems, which means there is not much recycled air or connection between labs via the HVAC system.

RESTROOMS

Restrooms will be one person only; placards or other signage will be placed on the door to specify if restroom is vacant or occupied.
Our Primary Goal will be to Minimize Transmission

4 RESEARCH SAFETY MEASURES for BioSci2

BUILDING SIGNAGE

Signage will be placed throughout the building to remind researchers of safe COVID-19 practices including entry and exit procedures, number of people allowed in each room, use of face coverings, hand washing and social distancing.

Signage describing traffic flow and related matters will specify that those instructions only apply to non-emergency situations. **In an emergency, the best exit route possible should be taken.**
Our Primary Goal will be to Minimize Transmission

4  RESEARCH SAFETY MEASURES for BioSci2

DELIVERIES

Deliveries will continue to be received as they are now. Ordered goods to MCDB and EEMB labs will continue to be received at an adjacent building and lab personnel notified that they should go pick them up. Delivery personnel such as UPS bringing packages to NRI labs will continue to come to the front door of the building, call one of the two cell phone numbers posted on the door for critical lab personnel that are in the building daily from 9-12 and 12-3 who will let them into the building. They will then deliver their packages to the 4th floor conference room, where lab personnel will subsequently pick them up and take care of the required paperwork remotely with the NRI staff. In the event that this mechanism does not scale up well with increased lab personnel in this ramp-up, it may be necessary to have one NRI staff member work part time in the NRI Administrative offices on the 6th floor to receive and process orders.

FIRE DOORS

Fire doors will remain closed as per fire code. This includes doors to stairwells that will now need to be accessed more extensively than before. The hardware to these doors will be a high-traffic touchpoint and require regular cleaning.
4. RESEARCH SAFETY MEASURES (PI part)

PI SAFETY PLAN AND SHIFT SCHEDULE

Each PI must submit a detailed plan for returning to research (a simple Google form), which describes why it is essential for work to resume now.

Priority criteria for return to research:
• Highest priority given to assistant professors, especially those nearing their tenure cases;
• Highest priority given to graduate students and postdoctoral researchers nearing the end of their term;
• High priority given to senior graduate students and postdocs;
• In general, undergraduate researchers should not be part of research in stage 3.

PIs will meet with their lab members to discuss who will work at what times in the lab, taking into account both individual research and personal needs. Each lab will set up its own work shift schedule and times for disinfection and ventilation.

No researcher is to be coerced by anyone to return to on-campus research during the early stages of the pandemic should they have concerns for themselves and/or the people around them.

Limited, monitored access to offices for compelling reasons (counted in 15%).

Each PI must also include modifications of PPE to accommodate research during COVID-19 and any modifications to CHP and/or SOPs.

Each lab plan must include ramp down and shutdown plans for research should either be necessary.

PIs are responsible for what happens in their space, including their team’s compliance with guidelines.
Our Primary Goal will be to Minimize Transmission

5. MINIMIZE DENSITY AND PERSONAL SAFETY IN BUILDINGS AND INDIVIDUAL LABS

LOW DENSITY MUST BE ACHIEVED CONSISTENT WITH LAB SAFETY PRACTICES

• Masks or face coverings must be worn as part of lab PPE, but be sure that their use is consistent with lab safety (e.g. flammability)

• Face coverings should be of natural fibers, same as the recommendation for street clothes in the lab. We recommend a face shield when handling pyrophorics.

• Smaller labs in BioSci 2 must have no more than 1 researcher/lab to maintain appropriate distance; it may be possible to have more than 1 researcher per lab for labs > 500 sq. ft., assuming there is sufficient room for people to pass one another and maintain at least 6 feet between them.

• consider using a use “remote buddies” system if and only if it is consistent with your lab’s safety requirements

• PIs should review their SOPs/CHP with regard to how lab safety will be achieved for their specific processes during the time of COVID-19 and update if necessary.

• WORK FROM HOME whenever possible (PIs included)

• NO IN-PERSON MEETINGS. Department meeting rooms will remain closed for meetings during Stage 3. The 4th floor NRI/Stem Cell conference room will remain open only for package delivery.
Rectangles with numbers indicate occupancy

- Lafferty (in construction)
- Eliason
- Oakley
- Wilbanks
- Moeller
- Stier
Rectangles with numbers indicate occupancy.
Rectangles with numbers indicate occupancy️ 1

6th Floor BioSci2 (NRI part only, not ARC)
Our Primary Goal will be to Minimize Transmission


- OR goal for restart (stage 3): 15% of normal occupancy
- Normal building capacity = 280 grads/postdocs/faculty/staff plus 143 undergraduate researchers = 423 total people at full occupancy. Thus, to achieve 15% occupancy, no more than 63 workers will be allowed in the building at one time (stage 3); $423 \times 0.15 = 63$
- Each lab will have its own work shift strategy, but at no time will the number of people in a room exceed the approved number.
- It should also be remembered that there are a significant number of workers already approved to work in BioSci2 via ongoing Critical Research (several dozen); a subset of these personnel are from other buildings working in the ARC. The current 15% goal should be additive above those critical project numbers.
- In all cases, lab occupancy will be consistent with a density of no more than 1 person/250 sq. ft (a halo with 9 foot radius), with the exception of smaller rooms that are self contained.
- SOCIAL DISTANCING WHILE WORKING:
  - Keep > 9 feet from others in long-time working conditions
  - STAY IN YOUR ZONE (on your floor) as much as possible
  - Always wear a face covering
Table 1. Biological Sciences 2 Census and Shift Occupancies

<table>
<thead>
<tr>
<th>Unit/Lab</th>
<th>Grads/Postdocs/Staff/Faculty</th>
<th>Undergrads</th>
<th>Total</th>
<th>Add’tl # people on a shift compared to Phase 2</th>
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<td>4</td>
<td>0*</td>
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<td>56</td>
<td>129</td>
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</tbody>
</table>

*TThese laboratories had a number of researchers working in Phase 2 maintaining cell lines, flies, etc. In total these represent more than 40 essential workers and at least 8 FTE.

#These laboratories are involved in development of the Covid-19 test.
Additional Personal Safety Measures for BioSci2

**Buddy System**

People working alone in their groups should make contact with a "buddy" to make sure that all workers have a contact should an injury occur. The shared laboratories in LSB should make it possible for individuals from different research group to be in visual contact. If there is not a person in visual contact individuals should make contact with others with their phone. When leaving the building inform your buddy.

Individuals working late at night may want to designate a buddy to accompany them as they leave the building.

Communal food/break rooms will be closed. No cooking, group eating/chatting, washing dishes. Food may be consumed at people’s individual desks, followed by extensive cleaning of the area. Water bottles also only at an individual’s desk.

No food storage in common refrigerators; bring individual coolers from home, if cooling is required.

Do not use water fountains.
Our Primary Goal will be to Minimize Transmission

7. MINIMIZE FOMITE (surface) TRANSFER

Rigorous Cleaning Procedures for Labs and for Researchers

- GLOVES worn at all times in labs

- CLEAN WORK SURFACES (benches, door handles, instrument panels, keyboards...) at start/during/end of work
  - CDC protocols: clean (soap/water) then disinfect (bleach/alcohol); a half hour will be scheduled between shifts for sanitization/ventilation.
  - Cleaning stations must be available in all labs
  - Individual labs (and managers of shared spaces) should identify surfaces to be cleaned regularly, and create a log to record/enforce cleaning activity

- THOROUGHLY and REGULARLY WASH HANDS (or use hand sanitizer) hand washing or sanitizing stations in all labs
Our Primary Goal will be to Minimize Transmission

8. PREPARING FOR A POSITIVE CASE

Enable Efficient Contact Tracing in Event of Positive Case

a) ENTRY LOGS (via QR code or Google Form) will be used to permit coarse tracking of location and knowledge of who is in the building. If you do not log into the building, this will severely inhibit efficient tracking; it may also lead to you losing the privilege of entering the building at all.
Our Primary Goal will be to Minimize Transmission

Rules for Food and Drink

• Communal food/break rooms will be closed. No cooking, group eating/chatting, washing dishes. Food may be consumed at people’s individual desks, followed by extensive cleaning of the area. Water bottles also only at an individual’s desk.

• No food storage in common refrigerators; bring individual coolers from home, if cooling is required.

• Do not use water fountains.

Pets

• No pets allowed
Our Primary Goal will be to Minimize Transmission

9. ACTION ITEMS FOR A POSITIVE CASE

a) NOTIFY PI/Building Committee, and MCDB, EEMB, NRI and ARC leadership who will notify campus, which will notify the County

b) CLEAN ALL LABS WHERE INFECTED PERSON WORKED AND ALL CONNECTED LABS – This effort will likely be coordinated by the County.

   CDC cleaning protocol: Leave unused 1 day, then clean with soap and disinfect with bleach or alcohol; alternatively, leave unused for 7 days

c) TRACING: Committee/Campus will use access logs to identify possibly exposed workers (others sharing labs and others who might have been in contact with infected person)

d) THOSE AT RISK should quarantine 14 days and contact their health care professional(s) to discuss testing and next-steps.

   After a positive case, everyone in the same lab, or even everyone on the same floor, could be quarantined for 2 weeks

   PIs/groups need contingency plans for such a situation

e) It is also possible that the campus or state may re-institute research shutdowns or shelter-in-place; contingency plans should be in place.