





Critical/essential research also applies to; tasks required for maintenance of equipment that, if not done, could result in damage, experiments that have a small window for completion, and clinical research where the health and safety of human research participants could be impacted should research activities cease



PIs interested in performing research during Phase 1x must review the Office of Research Guidelines for UC Davis Research Ramp-Up/Ramp-Down, and receive approval from the Department Chair.

## Approval Process 1. Pls name, Department/School/College, and contact information 2. Project Title 3. Justification that the project meets the categorization for Phase 2 • Phase 1x uses Phase 2 categorization for approval 4. Lab/Facility/Studio address 5. A plan outlining the approach used for maintaining low density of personnel on site. 6. A statement agreeing to adopt the facility SOP, use proper PPE as meeded, and adhere to the constraints specified in this addendum and the previous guidance.

In order to receive approval from the Department Chair, the PI must send a request letter with the following information.



In order to obtain approval, the PI must also create an electronic system of communication and scheduling, complete the Working during COVID-19 SOP, and obtain all COVID and research related PPE.I If PPE cannot be obtained, work cannot begin. PIs should begin forming their approval requests while simultaneously completing required documentation and training.

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	Working During C	OVID-19 Pandemic			
ST	ANDARD OPERATING P	ROCEDURE (SOP) - DRAFT			
	Disinfection procedure to reduce the risk of SARS-CoV-2 in the workplace				
Type of SOP: All personnel who are the associated trainin	subject to these SOP require	educe the risk of SAKS-COV-2 in the workplace ments must review the completed SOP and sign ust be kept with the UC Davis Laboratory Safety			
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We have been getting a lot of questions about the Working During COVID-19 Pandemic SOP. What we would like to see in the detailed procedure is a plan on how you will change your lab techniques based on this training and provided guidance documents. These plans should include how you will adjust for physical distancing, scheduling and contact tracing, low volume of personnel, and disinfection techniques. It may be very similar to the plan you are sending in order to receive research approval. If you have any more questions on this you can send your SOP to be reviewed by the Safety Coordinators, which are Lucy Joseph and myself. Once the SOP is complete, the PI will train all personnel and document training to be kept in the lab's safety binder.



Both PIs and researchers must receive all proper training in addition to ensuring that all other lab relevant training is up to date. Both parties must review and complete the Face coverings guidance document, the Public Spaces SOP, and the lab specific Work during COVID-19 SOP in addition to viewing this webinar. All documents should be provided to the PIs by the department chairs.



Prior to submitting a request for approval to the Chair, the PIs must complete the PI checklist which documents that all training and preparation for research during Phase 1x has been completed.



Researchers, in addition to training, must complete a plan for working in the laboratory. Requirements listed in the approval process may be used to develop this plan. Researchers must also complete a self assessment, which will be reviewed by the PI and the Safety Committee to evaluate if it is safe for the researcher to return to work. If not, the researcher will meet with their PI, if they are comfortable, or with the Safety Committee to discuss any special accommodations. If accommodations cannot be made, the researcher will be allowed to continue to work remotely.

The following checklist must be con supervisor prior to returning to wo	npleted and signed by your Principal Investigator / k.
COVID-19 training programs required by the d coverings and use of RMI public spaces) Specific work activities have been discussed at	epartment have been completed (training webinar and review of documents on face
Workspace (e.g. lab or public space) COVID-15 Required PPE for conducting the work has bee The self-assessment check list has been comp	SOP for disinfection has been reviewed and signed n determined with PI / supervisor, including PPE for COVID-19 and normal hazards eted and the review committee has returned a positive assessment.
Employee name:	PI/Supervisor name:
Signature:	Signature:
Date:	Date:

Employees must also fill out an employee checklist to ensure all requirements have been met. This will be approved of by the PI and should be kept on file in the lab safety binder.



Once all requirements by all parties have been met, PIs will send their checklists to the Department Chairs and Employees will send theirs to their PIs for approval.



If you are required to work during this time, measures must be taken to ensure your safety and the safety of those around you. Strategic planning and communication with the PI, fellow coworkers, and those sharing the space, especially in shared lab spaces, is required





Resources such as emails, texts, Slack or other online messaging applications can be used.



Essential employees must use an electronic calendar in order to; reserve and coordinate times to be present in lab spaces, and reserve use of common equipment. When creating schedules, the following is advised; work in nonover lapping shifts to keep the amount of people in a space to a minimum, incorporate a "blank" time when no one is working to allow any viral particles to become inactivated between shifts, limit amount of personnel in a lab space, and log the locations accessed by each personnel daily to allow for contact tracing. Google calendar is a common easy to use resource for this purpose.



Individuals are required to maintain a distance of **at least** 6 ft apart. Take into account each lab space including shared "open lab" spaces. The amount of persons allowed in a lab at each time is dependent on the size of the lab space. Avoid work that involves two or more people being in close proximity of each other



In the Addendum to Guidelines for Research Ramp up Phase 1x, the University recommended that no more than 1 person can occupy a space of 250 sq ft and no more than one person per day in small spaces. Labs in RMI buildings are comprised of multiple lab benches and are approximately 900 to 945 sq ft. However, workers standing directly across from each other at a lab bench are not adequately distanced as the lab benches are only approximately 5 ft (1.5m) wide. Also, if the work you are doing requires you to move around a lot, this limits the amount of people that can occupy the space. This schematic is an example of measurements of a lab in 3221 RMI South, which is about 900 sq. ft. We measured the lab benches and the space between the lab benches, as well as the space in the walkway. The equipment and layout of this space is unique to this lab and each lab will be different. It is important to evaluate each space for what you will be doing in each situation. In addition, multiple labs may share common spaces, which will increase the amount of people in a given space. Due to this, the departments of Viticulture and Enology and Food Science and Technology are recommending 2 people per lab space at one time. Work can be done in non-overlapping shifts that do not necessarily need to be comprised of the same people. Again, scheduling, logging, and communication between labs and personnel is critical to effectively reduce risk of exposures.



Lab support rooms are considered small spaces. These rooms are approximately 300 square feet, and may contain equipment making the amount of usable space for distancing smaller. These rooms should be limited to one person only.



This is an example of a space with multiple labs. The schematic from the previous two slides are from the Harris lab section. This first section is what is being called a "lab-space" but the fact that there are multiple labs in this space needs to be considered. Each lab will be limited to 2 or less people. Everyone working in this room is currently on a shared listserv and will eventually have a shared electronic calendar to sign up for times to be in each lab. This is so we can limit the number of people in the lab in order to safely maintain distancing with everyone actively in the space while accessing all of the areas in the lab that we need to.





The CDC has recommended the following guidelines in order to prevent the spread of illnesses such as COVID-19. Avoid close contact with people who are sick. Cover your cough or sneeze with a tissue, throw the tissue away, and wash your hands. Avoid touching your eyes, nose, and mouth. Wear a face covering that covers your nose and mouth. Clean and disinfect high traffic areas such as door knobs, light switches, and shared equipment. Stay home when you are sick. Practice frequent hand washing with soap and water for at least 20 seconds.

YMPTOM	COVID-19	COMMON	FLU	ALLERGIES					
Fever	Common	Rare	Common	Sometimes					
Dry cough Shortness of breath Headaches Aches and pains Sore throat Fatigue Diarrhea Runny nose	Common	Mild	Common	Sometimes					
	Common Sometimes	No Rare	No Common	Common Sometimes					
					Sometimes	Common	Common	No	
	Sometimes Sometimes Rare Rare	Common Sometimes No Common	Common Common Sometimes* Sometimes	No Sometimes No Common					
					Sneezing	No	Common	No	Common

Perform daily self monitoring for symptoms. Common symptoms of COVID-19 are fever, dry cough, and shortness of breath, however, other symptoms may be experienced.



If you become sick with any symptoms, stay home and do not come in to work. If you are experiencing symptoms similar to those of COVID-19, report to your health care provider as well as your PI or Supervisor. Depending on the severity of your symptoms, you may need medical treatment and testing. If you qualify for testing and are confirmed positive, you must report to both the Campus Privacy Office and either Occupational Health or Student Health.



## Positive case in RMI

If a positive case is reported in any building in the RMI Complex:

- All exposed areas will be locked down
  - Key card access suspended
- Custodial services will clean and disinfect the area
- Contacts will be identified and notified through Campus Privacy Office and Health Services

If a positive case in any building in the RMI complex is reported, all exposed areas will be locked down with key card access suspended. Custodial services will be contacted to perform a deep clean and disinfection of the affected areas. All contacts with the positive individual will be identified and notified through the Campus Privacy Office and Health Services.



A good way of ensuring this happens is to have a check list of items in each lab – and sheet to document when and who performed this activity.

## Cleaning, sanitizing, and disinfecting are different!



- · Physically removes dirt and impurities,
- germs not necessarily killed
- Sanitizing
  - Reduces amount of germs on surfaces
- Disinfecting:
  - · Inactivates or "kills" germs on surfaces

Cleaning: Physically removes dirt and impurities from surfaces. Germs are physically removed during this process, but not necessarily killed Sanitizing: Reduces amount of germs on surfaces to a "safe" level as determined

by public health standards

Photo by

Disinfecting: Inactivates or "kills" germs on surfaces

It is important to know the difference in order to help keep everyone safe.



Some effective disinfectants against the virus responsible for COVID-19 are: quaternary ammonium compounds, 70% ethanol, 70-75% isopropanol, and diluted bleach solutions. Other EPA approved disinfectants are available on the EPA website.



We will now go into more detail on bleach solutions as the dilutions can be tricky. Commercial bleach comes in concentrations of 5-8% of sodium hypochlorite. The concentration can be found on the label. Check the concentration in order to calculate the appropriate dilution. The CDC is recommending dilute solutions of 1,000 ppm or 0.12% of sodium hypochlorite. This is different for labs that are using bleach for inactivating liquid cultures. For inactivating liquid cultures, solutions of about 5,000-8,000 ppm sodium hypochlorite, which is equal to a 10% final concentration of bleach is used. Bleach solutions need to be made fresh daily as dilute bleach solutions degrade quickly.

Liquid Bleach Type	Amount of Bleach	Amount of Cool Tap Water
2% Sodium Hypochlorite Active Ingredient	15 mL	240 mL
3% Sodium Hypochlorite Active Ingredient	10 mL	240 mL
4% Sodium Hypochlorite Active Ingredient	7.5 mL	240 mL
5% Sodium Hypochlorite Active Ingredient	6 mL	240 mL
6% Sodium Hypochlorite Active Ingredient	5 mL	240 mL
7% Sodium Hypochlorite Active Ingredient	4.5 mL	240 mL
8% Sodium Hypochlorite Active Ingredient	3.75 mL	240 mL
9% Sodium Hypochlorite Active Ingredient	3.5 mL	240 mL
10% Sodium Hypochlorite Active Ingredient	3 mL	240 mL

This is a good guide from Michigan State University on how to make an appropriate dilute solution from different concentrations of sodium hypochlorite in commercial liquid bleach. We will also be distributing an SOP on diluting bleach for disinfection purposes.





Since the beginning of March 2020, reports of cleaner and disinfectant related poisonings have increased significantly. Bleach related poisonings were the most common with an increase of 62%, followed by non-alcohol based disinfectants and hand sanitizer poisonings with increases of 36%. Inhalation exposures increased by 35% for cleaners and 109% for disinfectants. This is a reminder of the hazardous nature of cleaners and disinfectants and why it is important to abide by all safety precautions.







Face coverings are now required in shared spaces such as hallways, stairwells, and common areas except for when eating and drinking Private offices and other single use spaces are exempt from this requirement. There is a document on face coverings from the departments that you will have to read, if you have not done so already. This document details when, where, and what type of face coverings are required in different situations.



Bathrooms are single occupancy only. When vacant, the bathroom doors are to be left open. When entering the bathroom, close the door behind you to let others know it is occupied. When finished, use a paper towel to touch the door handle, and leave the bathroom door open to signal it is ready for the next person.

## Single Occupancy Table

Please clean with sanitizer provided before and after use.



Tables in eating areas are now single occupancy, and must be disinfected before and after each use. Eating outside is advised, however, these tables will also be single occupancy. When you arrive in an eating area, you must be wearing your face covering. Face coverings can be removed right before you eat and must be replaced after you are finished.



Elevators are also single occupancy. Face coverings are required while in the elevator and it is advised to wash your hands with soap and water or use hand sanitizer before and after using the elevator



During this time, all conference rooms will be locked. Computer rooms will have limited access with a maximum of 2-3 people at a time distanced appropriately. However, if any issues arise in this space this will be reassessed. The mail room is a small space and is now single occupancy. The door to the mail room will most likely be left propped open so that others can see if the room is occupied before entering. If you see any room with a door closed, knock before entering, to see if the room is occupied.



While in a stairwell, maintain a distance of 6 ft (1.8 m) and wear a face covering. If others cannot see you, alert them of your presence. If possible, try to only have one person in a stair well and avoid passing.



Thank you for attending, this concludes the Performing Essential/Critical Research During COVID-19 Pandemic training, we will now be taking any questions. Again please type your questions into the chat.