

Department of Physics & Astronomy Guidance for Principal Investigators of Laboratory-Based Research Operation for Phase Red to Phase Orange Research Alert Level Protocol Transition

Following the University of Utah's Research Alert Level protocol ([see here](#)), we will move our research operation to "Phase Orange" this coming Monday, May 11. Under Phase Orange, limited research activities can be conducted onsite on campus and in other facilities and field sites. Limited research in this context is defined as activities that can be conducted safely with limited personnel and COVID-19 specific protocols for reduced personnel density, physical distancing, and sanitizing workspaces. All personnel should still work from home whenever possible, and accommodations should be made to allow people at high risk for severe illness to continue to telecommute. The Phase Orange Directives do not affect the Telecommuting-directive of non-research personnel.

In order to prevent misunderstandings with regard to what entering the Phase Orange Research Alert Level protocol does, it shall be pointed what this measure does NOT imply the following:

- It does NOT imply that Departmental facilities and building are open to the public;
- It does NOT imply that Departmental offices are open and that graduate student, staff, or faculty can return to their offices. In fact, as the protocol does allow for select researcher to return to laboratories, it is now even more important than during phase red that all offices remain empty and unused.
- It does NOT imply that departmental research operations resume their normal work patterns. Phase Orange does not allow us to just return to our labs and begin to work in the way we used to work before we entered the current phase red protocol.

Details about the guidelines for Phase Orange Research as defined by the University of Utah's Office of the Vice-President for Research can be found at:

<https://research.utah.edu/coronavirus/allowable-research-under-orange-hazard-levels.php>

To implement these guidelines, the College of Science and the Department of Physics & Astronomy will require the following conditions to be met before research operations can be resumed:

1. Each PI should fill out the "Principle Investigator Form" to announce his/her intention and plan to conduct research in Orange Phase. (Provided by the COS, attached)
2. Each researcher should fill out the "Lab Personnel Form" and adhere to the safety requirements stated in that form. (Provided by the COS, attached)
3. Each research group should fill out "Lab Schedule Form" for each lab room to facilitate contact tracing should it become necessary in the future. (Provided by the COS, attached). This form should be filled out weekly unless the schedule doesn't change for that week. The number of allowed occupants in a lab room at any moment should be determined by the criterion that the "6-foot-apart" rule can be satisfied. When scheduling, the labmates should communicate with each other so that a 1-hour gap between shifts can exist.

Please email all new and changed forms (scan them if necessary) to the Department Safety Coordinator Zhiheng Liu (zhliu@physics.utah.edu) for archiving. After sending these forms, please wait for Zhiheng to acknowledge the receipt and approve the compliance of the forms' content. You are not allowed to restart any work in the lab until your forms are approved by the safety committee (this is COS

requirements). You also must e-mail to Zhiheng signed copies of up-to-date regular annual safety training forms for each person who is authorized to work in your lab;

Using forms is a bureaucratic burden. However, these forms are crucial in order to ensure that the Department and the College have the information that is needed to trace laboratory contacts for the case that we have corona virus spread within out laboratories.

Following the plans for laboratory occupancy as outlined by the research groups in the forms is crucial. While laboratory research is permitted during Phase Orange, it is only permitted under application of greatest care and advanced planning.

In addition there is a requirement from of the Office of VPR that each research lab resuming its operation has to register with EHS. Here is the link:

<https://app.smartsheet.com/b/form/8b86b164c210411f97bbd76ae1a9b597>

A copy of the response to the submission of this sheet has to be sent to Zhiheng as well.

Note labs cannot open until all of the above requirements have been met, all safety procedures are in place and all sanitizing liquids, face masks and gloves for your personnel are provided.

- 1) A limited number of boxes with nitrile and latex gloves is available at the department store. Please restrict your order to a minimum.
- 2) Not-rated face masks are appear to be available from the general store.
- 3) Isopropanol and ethanol are available from the Dep. of Chemistry store. You need 70% or higher solution to work as surface sanitizer.
- 4) We will try get supply of bleach solutions and/or other water-based sanitizing liquids, hydrogenperoxide by Monday (May 11th). Note that these sanitizers are corrosive and they are therefore to be used to utmost care on scientific equipment.

As a reminder, the regular annual safety training should also be completed before one can work in the lab and all regular safety rules, including the buddy rule, must be followed. In order to follow the buddy rules and NOT violate physical distancing rules at the same time, electronic buddying via phone, skype, Zoom etc. is recommend. During Phase Orange, we want to emphasize that the following additional safety precautions and rules regarding COVID-19 should be diligently practiced when conducting research in labs:

1. Don't come to the lab when you are sick or have even slightest cold symptom. Instead, get tested for COVID-19 immediately.
2. Only come to the lab when necessary. The lab can't serve as office or living space, absolutely no food or drink. Do not socialize in the labs or any other departmental rooms.
3. Follow the "6-feet-apart" rule when there are labmates working in the same lab. As stated above, when working alone, group members should check with each other remotely through email, phone, or messaging apps from time to time to make sure everyone is safe. Follow the "6-feet-apart" rule at all times, including in instance when you move on hallways. As some hallways are less than 6ft wide, this implies that, when two people walks into a hallways at the same times, one of the two has to back out

of the Hallway first (e.g. by stepping into a room) and let the other person pass at a safe distance. Not following the 6ft rule out of convenience is unacceptable. This example shows that the personnel permitted to work in our building needs to be kept at a minimum at all times.

4. Wear face coverings all the time during your work time in the lab to prevent asymptomatic COVID-19 spread from inadvertently transmitting the virus to labmates or on surfaces where the coronaviruses can remain intact for up to three days. The department will try to acquire simple face covers through appropriate channels in the near future. You can also use your own face covers.

5. Sanitize the instruments and work space frequently. Each research group is encouraged to prepare sanitizing supplies such as disinfecting wipes in the labs.

6. There are recommendations by the Office of the VPR and COS to assign restrooms for dedicated research groups to limit possible virus cross exposure. As this is impractical given the limited number of bathrooms in the P&A building, we you to instruct research personnel to limit their bathroom use to the building where their work takes place and sanitize bathrooms before and after usage. (sanitization liquids and equipment should be provided by custodial and building managers)

7. Measures/polices specific for P&A.

7.1. The measures listed above are provided by Office of the VPR, the College of Science and the Department of P&A, through the Department Chair and the Departmental Safety Committee. In addition, PIs are strongly recommended you to take extra safety steps that are commensurate with specific conditions of their labs and research operations. (1) If possible, please arrange that each of your lab rooms is used by only one student at a time. (2) If possible split operation of your lab in "spatially isolated" student (group of students); this, for example, could be that student A works all the time only in room X and no other student is allowed to enter this room. (3) Consider implementing extended working shifts, this for example could be that student A works in room X for a week and student B start using this room the following week. (4) Devise protocols for contact-free sample transfers. (5) If your lab has rooms in INSCC and JFB consider dividing your personnel into two groups each working in one other buildings.

Other P&A safety rules for the ORANGE stage

7.2. Machine shop and SEM facility will stay closed during stage ORANGE initially. Once guidance is available for the safe operation of these departmental recharge centers, this could change.

7.3. The responsibility for the sheared chem. lab rooms is assigned for JFB 328 to the Vardeny group and for INSCC 151 to the Boehme group. PI/safety officers of these groups coordinate access, scheduling and sanitization of these rooms.

Thanks in advance for your cooperation and hard work! Together we will go through this safely and productively!