

Department of Physics & Astronomy Guidance for Laboratory-Based Research Operations

(Last update: February 22, 2021)

Following the University of Utah's Research Alert Level protocol ([see here](#)), our research operations still follow the "Phase Orange" protocols. 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.

The Phase Orange Research Alert Level protocol 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 researchers to be present in the P&A buildings, it is now even more important than during phase red in spring 2020 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 the pandemic began.

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/documents/Health-Safety-Compliance-Under-Orange_5-11-20.pdf

To implement these guidelines, the College of Science and the Department of Physics & Astronomy will continue to require the following conditions to be met. The forms needed for this can be found under "COVID Forms for Researchers" at <http://www.physics.utah.edu/internal/index.php>

1. Each PI has to have filled out the "Principle Investigator Form".
2. Each researcher should fill out the "Lab Personnel Form" and adhere to the safety requirements stated in that form.
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. This form should be filled out weekly. If the schedule doesn't change for that week, a PI of laboratory-based research or any designee of this PI should provide an explicit notification that the research schedule has not changed.

The number of allowed occupants in a labroom at any moment should be determined by the criterion that the "6-foot-apart" rule can be satisfied. When scheduling, the planned lab coworkers 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 Dr. Zhiheng Liu (zhliu@physics.utah.edu) for archiving. After sending these forms, please wait for Dr. Liu to acknowledge the receipt and approve the compliance of the forms' content. You are not allowed to conduct work in your labs until their receipts are acknowledged and approved by Dr. Liu. You also must e-mail to Dr. Liu signed copies of up-to-date regular annual safety training forms for each person who is authorized to work in your lab;

Using the forms described above 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 our 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. If deviations from the scheduled laboratory occupation plan happen due to unforeseen circumstance, updated Lab Schedule forms must be sent to Dr. Liu as soon as these changes occur.

In addition there is a requirement from 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 Dr. Liu as well.

Note that 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.

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 recommended. 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 drinks are permitted. 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 walk into a hallway at the same time, 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 have acquired simple face covers. Please contact James Norwood (james@physics.utah.edu) or your PI for this.
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/policies 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, Pls 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

7.2. The responsibility for the shared chem. lab rooms is assigned for JFB 328 to the Vardeny group and for INSCC 151 to Dr. Zhiheng Liu.

Thanks in advance for your continued cooperation and for your hard work!