Phase I Return to Research
Updated June 18, 2020; June 26, 2020; July 1, 2020; July 2, 2020

Introduction
In this document we aim to facilitate an initial return to operation for WesternU laboratory staff, this plan is developed to provide guidance for laboratory staff during the current phase of the COVID-19 pandemic. The goal is to enable all WesternU research to resume as soon as possible while mitigating risks to personal safety and maintaining public health requirements, while also preventing university closure by the local public health authority and/or OSHA for non-compliance. Since the resurgence of COVID-19 is a very real possibility, our ability to gradually and sustainably return research and scholarly activities to 'normal' will depend on everyone's commitment to physical distancing and other safety measures at work and in our personal lives.

When you come to campus, you are required to wear a face covering at all times while you are on campus. You are to go straight to your lab, perform the work required, then leave as soon as it is safe to do so. This is to help lessen the risk of exposure to COVID-19.

If a worker feels any signs of illness, no matter how mild, they must not perform work of any kind on campus. People should not come to campus if someone in their household becomes ill with COVID-19 symptoms. The risks posed by COVID-19 can be mitigated if everyone follows the safe practices contained herein.

If county or state health officials provide limiting/restrictive guidance, research efforts may need to drop back to a lower phase as appropriate and will again be ramped up when the guidance changes. Guidelines will be continually updated for all phases as necessary by leveraging experiences during the initial ramp-up phases.

Some research projects have successfully and safely transitioned to being fully remote, requiring infrequent or no access to university spaces. While challenges exist for faculty working at home (see equity, diversity, and inclusivity (EDI) considerations below), priority for work on campus for the foreseeable future should be given to those projects that are dependent on campus facilities.

Our standards for safety and safe work practices must be rigorously and equitably maintained, with adequate access to personal protective equipment (PPE) specific to routine research hazards, as well as enhanced supplies required to reduce the spread of COVID-19 (e.g., cloth face coverings, sanitizers), provided centrally through Environment, Health & Safety (EH&S) for everyone working on campus. If the required laboratory PPE cannot be provided at any point, not only can research not be ramped up to the next level, but it may also have to be ramped down, until these supplies are available. If the required PPE is not available and physical distancing cannot be maintained, the research cannot ramp up.

Considerations and accommodations need to be made very carefully for individuals in high-risk

groups who are particularly vulnerable to COVID-19. Contact HR to discuss options related to employees seeking accommodation.

Ramp-up research activities in such a way as to mitigate the risks of contracting COVID-19 for all employees in compliance with public health guidelines.
●Everyone must complete the WesternU Symptom Monitoring Survey each day before coming to work.
●The number of people in a workspace must be limited. To maximize the utility of workspaces, staggered work shifts, wherever feasible and allowable, should be encouraged and implemented.

Research Decision-Making Authority
After the President, Provost, and Sr. VP of Research have made the decision to initiate resumption of campus research activities, Deans have the final approval responsibility during the ramp-up for research activities within their College. Prior to resuming research activities operational plans for each independent research program must be submitted to the appropriate department chair/director for provisional written approval and then to the dean (or the dean's designee) for final written approval. EH&S review and approval will be required.

Monitoring and Enforcement
The burden for compliance with research ramp-up operational plans is on PIs. EH&S staff has been charged to conduct spot checks to confirm appropriate density, distancing, and protective measures. Departmental and division leadership should also monitor compliance. Researchers must be informed of their right to report noncompliance problems to the PI. If appropriate action is not taken, the reporter must be empowered to take their concerns to the department chair who is obligated to follow up with the PI and report to the dean.

Non-compliance with existing safety policies and principles could lead to the shutdown of on-campus research in the non-compliant lab or research space and may require review by a faculty committee providing research oversight. Non-compliance could also result in discipline under applicable WesternU policies.

Research Ramp-Down
In the event of any applicable local, state, or federal orders to resume Safer at Home sheltering, or circumstances such as a lab- or building-specific outbreak (defined as 3 or more cases in a set period of time) dictate an immediate campus response, research activities may need to ramp down rapidly again. Personnel should have a plan in place to implement a ramp-down upon short notice.

Phases of Research Ramp-Up
During Phases 1 through 3, only personnel with a need to access physical locations to advance research should be on-site, and those personnel should minimize time on campus. All other personnel should remain off-site during the research ramp-up, unless otherwise instructed their Dean or the dean's designee. Meetings and workshops should be conducted remotely.

Labs should ensure that they have necessary supplies, including proper PPE and those necessary for proper decontamination of surfaces. PIs and their teams should plan for supply chain issues that may delay the resumption of research and coordinate with the EH&S central procurement team.

Establish a schedule in coordination with other PI's that share the same space (Similar to the process you already employ for reserving time for shared equipment).

Phase I
Ultra-low density research activities (~10-25% of normal density onsite at any given time)
Prioritization is for research that cannot be conducted remotely and can be adjusted to function in an ultra-low density format as defined below.

Ultra-low density can be approximated as one person per 250 square feet of lab or research space, one person per bay, and a minimum of six feet of distance maintained between researchers at any given time, including in public/shared/common spaces.

Physical distancing of six feet, while widely recommended to reduce exposure to the coronavirus, is also acknowledged to be too little distance to account for all the aerosol particles generated by talking, breathing, and coughing, especially when sharing space for periods greater than a few minutes. (See https://www.sciencenews.org/article/coronavirus-covid-19-why-6-feet-may-not-be-enough-social-distance) Thus, in the first, ultra-low density phase, we are using the metric of one person per 250 square feet of space as a guideline to account for the fact that six feet of physical distancing will be hard to maintain in research spaces that have widely varied physical layouts and airflow patterns as well as common areas such as hallways and bathrooms. Research spaces contain different kinds of obstructions such as benches and equipment, entry and exit bottlenecks, and unusual (forced) airflow patterns due to fume hoods and biosafety cabinets that may spread aerosol particles further than in non-laboratory settings. Concerns over airflow or ventilation can be directed to the HVAC Team in Facilities. The 250 square foot metric is insufficient on its own to ensure a safe environment and should be used as a guideline along with other risk mitigation measures. While these may change over time, our physical distancing recommendations currently reflect those adopted by many peer institutions nationally.

The **goal** of this Phase I return for research is to allow **all laboratories** on campus to restart operations in a limited capacity with social distancing and proper controls in place to provide the safest environment for research staff. These plans should allow the research enterprise on campus to gradually ramp up until such time that remaining restrictions are lifted in the future. Note: Prior to this phase of return to research, only research that has focused on IACUC protocols or work that would lead to severe disruption or loss was allowed to continue. Few researchers have been back in laboratories since the initial campus shutdown in March.

- Overall, research laboratories will follow Stage 2 of CA Governor Newsom's roadmap (https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/COVID-19-County-Variance-Attestation-Memo.aspx),

- With guidance of WesternU's Coronavirus Response Team (CRT), and in accordance with local public health directives, research will be allowed to begin on campus once proper safeguards and training are implemented.
- Careful planning of activities will include lab-specific backup plans to quickly shutdown or limit on campus laboratory activities given the unpredictable nature of the pandemic.
- The goal of all research laboratories during this time is to allow for WesternU researchers to restart operations as efficiently as possible, while also ensuring the health and safety of our community is in alignment with local and state orders.

The following Phase 2 contingency plan was based on CDPH's Higher Education Guidance on Novel Coronavirus or COVID-19, the CDC's Interim Guidance for Administrators of US Institutions of Higher Education, CDC on Community Mitigation, and CDC's Guidance on Mass Gatherings.

Levers for contingencies are based on:

- Community transmission levels as reported by local health departments,
- Healthcare capacity (including testing capacity and healthcare facility/ancillary capacity),
- Public health capacity (such as infrastructure to report/track and isolate), and
- WesternU community characteristics (such as access to personal protective equipment (PPE), healthcare, access to social support, event type and level of engagement).

Furthermore, there is an additional contingency plan in place when a confirmed case has presented in any one laboratory or laboratory area regardless of community transmission.

Plan for Return to Operations

Prior to Day 1

The first day of operations will be determined by WesternU CRT approval based on local public health department decisions. The first day will be communicated to research faculty so that they understand that they must:

1) Work with WesternU EH&S to provide proper training to all staff expected to return
2) Confirm that all training is completed prior to personnel coming back to campus
3) Develop proper SOPs that can be implemented on the first day of return to on campus research work
4) Work to define schedules for personnel who will be on campus, possibly in collaboration with neighboring PIs in open or shared lab facilities
5) Ensure infographic posters from the CDC on COVID-19 are posted in laboratories (https://www.cdc.gov/coronavirus/2019-ncov/downloads/stop-the-spread-of-germs.pdf) to serve as a reminder of appropriate precautions.
6) Ensure that prior to returning to campus, all laboratory personnel have signed an acknowledgment that they have access to and are familiar with the following resources:

- WesternU CRT forms for Travel History, COVID-19 Symptoms/Exposure Reporting, and Ask the Coronavirus Response Team.
- WHO, CDC, and local public health authority updated information on trends of COVID-19 cases as seen on the WesternU Coronavirus Response Team website.
- COVID-19 Signs and Symptoms
- Complete COVID-19 Safety Training

***Day 1* Startup of Operations** – upon startup, a designated laboratory personnel should:

a. Confirm all lab equipment and Facilities are operating properly
b. Report to Facilities if something is not working properly
c. Ask EH&S for help if needed, especially regarding chemical waste disposal

Upon Return to Laboratory Each Person Should

a. Become acquainted with health monitoring checks (temperature screening and health questions) that will be required prior to entering WesternU buildings
   Personnel will agree to follow policies for health monitoring on campus and will work to self-monitor for potential COVID-19 symptoms
b. While on campus, a face covering at minimum is required at all times. When working inside laboratory, a face mask must be worn at all times. Additional PPEs (e.g., lab coat, gloves, goggles, face shield) should be donned as needed for research work.
c. While on campus, laboratory personnel must follow strict hand hygiene (e.g. , soap and water or alcohol-based hand sanitizer).
d. Review Social Distancing requirements in the laboratory focusing on how social distancing can be maintained in the laboratory areas
e. Confirm where PPEs are kept and how to acquire new PPEs
f. While on campus, a face covering at minimum is required at all times. When working inside laboratory, replace the face covering with a face mask and additional PPEs (e.g., lab coat, gloves, goggles, face shield), should be donned as needed for research work.

While in Work Area

a. Due to the varied laboratory setups throughout campus, each PI should work with their personnel to develop a plan to regularly clean the work area prior to beginning work, throughout the time working and prior to leaving the laboratory for the day.
b. During Phase I, in order to maintain a social distancing of 6 feet between personnel, only a limited number of people should be working in a given area.
   1) It is strongly recommended that those who share office space coordinate days and/or times they will be on campus. Both occupants cannot be in the office space at the same time. Workspaces and frequently touched surfaces must be wiped down with sanitizing wipes at the beginning of the work time and prior to leaving for the day.

2) Signage will be in place that directly states the maximum number of people that should be working in a lab or shared lab space at any time.
3) Staff will need to coordinate with their PI, and if indicated, other lab staff to ensure all who are present in the lab areas are complying the wearing of face masks, performing hand hygiene, and cleaning their work areas.

c. Each PI must work with their laboratory staff to develop a schedule for personnel to work in a laboratory area to maximize social distancing and minimize close contact of individuals.
   As needed, scheduling should be done in collaboration with neighboring PIs in open or shared lab facilities.
d. Packages should be picked up at the Receiving Dock located on the north side of the HEC. Packages should be properly disinfected prior to being brought into the laboratory.

When Leaving Work Area

a. During Phase I, and as best possible, laboratory personnel should clean and wipe down surfaces that they have been in contact with or used prior to leaving their work area, especially at the end of the day or when another person is expected to use the area after them.
b. Before leaving laboratory:
   1) laboratory-specific PPEs (e.g. lab coat, gloves) should be properly doffed (removed).
   2) hand hygiene must be undertaken
c. Upon leaving the lab, staff should use a disposable paper towel or elbow to push doors open or grasping door handles to leave
d. Dispose of face mask and replace with face covering, which must be kept on at all times until off campus property.

Required Self-Monitoring

Should a laboratory personnel become ill with COVID-19 symptoms (e.g., fever, cough, shortness of breath or difficulty breathing, chills, repeated shaking with chills, muscle pain, headache, sore throat, vomiting or diarrhea or new loss of taste or smell), they are to complete the WesternU CRT "COVID-19 Symptoms/Exposure Reporting" form and implement Self-Isolation.

All ill individuals are asked to stay home until: 1) at least 3 days (72 hours) have passed since recovery, defined as resolution of fever without the use of fever-reducing medications, 2) improvement in respiratory symptoms (e.g., cough, shortness of breath); and, 3) at least 10 days have passed since symptoms first appeared. If indicated, it is advised to seek appropriate medical care as soon as possible if symptoms worsen.

COVID-19 Contingency Plan

Each PI should plan, prior to returning to laboratory operations, a procedure on how to shut-down their laboratory if the COVID-19 pandemic changes to the point that it requires an immediate shut-down of operations. How to communicate with personnel, as well as how to

safely shut-down lab operations (e.g. shut down equipment, stop experiments, remove possible hazards) must be included in the plan. If there is chemical waste that must be dealt with, contact EH&S to arrange for pick-up/disposal.