Principles and Guidelines for Restarting Pre-Clinical Research in the Health Sciences

This document outlines principles and guidelines for restarting pre-clinical biomedical research across the University of Pittsburgh Schools of the Health Sciences. The goal is to provide a broad and consistent structure for schools, departments, institutes, and centers within the health sciences to engage in reopening research laboratories.

PRINCIPLES

1. Research is an essential function of the faculty, staff, and trainees of the University of Pittsburgh and the results of research are of great value to society. Biomedical research has much to contribute to the health of the population, including solutions to Covid-19.

2. The safety of members of the University community and the Allegheny County population is of paramount importance.

3. Planning should be grounded in science and CDC guidance regarding both good laboratory practice with infectious agents and specific information about SARS-CoV-2 and its observed manifestations in Pittsburgh.

4. The careers and livelihoods of many faculty, staff, students, and others at the University depend on the ability to continue ongoing and initiate new research activities.

Observations and Data:

1. Allegheny County has shown a relatively low level of SARS-Cov-2 impact compared to many other areas within the United States; the case load is low, and the curve of new cases is flattening. Information from UPMC indicates that most cases within Allegheny County are occurring within nursing homes and other senior communities.

2. Because of the low number of COVID-19 hospitalizations in Allegheny County, the absence of evidence of what testing positive or negative means for the individual and their contacts, limitations on the availability of reagents for testing, widespread testing of members of the University of Pittsburgh community is unlikely to be possible in the planning for the restarting of research activities. Instead, testing resources should be directed toward individuals with symptoms or other factors that lead to a substantially higher-than-average suspicion of SARS-CoV-2 infection.

3. Transmission of SARS-CoV-2 occurs primarily through dispersion of droplets containing the virus. This observation indicates that effective transmission prevention can be based on (a) physical distance between individuals of 6 or more feet; (b) frequent and thorough handwashing and surface cleaning and other good hygiene practices; and (c) the use of surgical masks or the equivalent to decrease the amount of potentially infectious materials being spread from infected individuals.
GUIDELINES

Requirements prior to entering the research environment

1. All work that can be performed remotely should continue to be performed remotely.
2. Vulnerable individuals, including those 65 or older and those with underlying medical conditions (as described by the CDC) that are not well-controlled, are encouraged to continue remote work.
3. Undergraduate, graduate, and postdoctoral learners can return to the laboratory within guidelines specified by the University of Pittsburgh and in consultation with their laboratory PI, institute director, division chief, or chair.
4. Any individuals who have traveled from an area of the US that remains under stay-at-home orders or who have travelled internationally within the last 14 days, must self-quarantine for 14 days (exemptions possible for personnel with patient care responsibilities who undergo appropriate screening).
5. If you have tested positive for Covid-19, have been in contact (without appropriate PPE) with someone known to have Covid-19, have been told by a public health official or employer that you may have been exposed to Covid-19 in the past two weeks, or been in contact with anyone showing Covid-19 symptoms (as detailed in #6), do not come to work and contact your supervisor immediately for further instructions.
6. If you are experiencing symptoms of new shortness of breath, cough, or sore throat within the past few days or have fever, sweating, chills, any loss of taste or smell, muscle aches, nausea, or diarrhea do not come to work and contact your supervisor immediately for further instructions.
7. For personnel returning to research laboratories, a Covid-19 safety training module must be completed successfully to gain building entry. For essential personnel who currently have access to research buildings they must complete the module to maintain entry rights.

Requirements within the research environment

8. Personnel entering a research facility are subject to any University of Pittsburgh or UPMC screening procedures that are currently in place for specific entrances before being allowed to proceed to their research laboratory.
9. Either a self-supplied cloth/barrier mask or a requested earloop face mask (at least surgical ASTM level 1) must be worn from the time of entry into the building until the time of exit from the building, except while eating with greater than 6 ft distancing, or in an enclosed single-person office space. Use of masks is encouraged during the entire commute for personnel taking public transport.
10. Personnel must use swipe card access (where available) to gain building access. All personnel should maintain a personal log of daily entry times and exit times, any ‘close contacts’ (as defined below), and confirmation of lack of exposure (#5 above) and symptoms (#6 above) that is checked weekly by the laboratory PI or supervisor (see https://covid19research.pitt.edu/restarting-research-plans/ for example)
11. Within the research building environment, a minimum of 6ft physical distancing must be maintained at all times including bathrooms, and breakrooms (apart from transient unavoidable situations—for example, personnel moving up and down stairwells). Elevators should be limited to 2 or 4 persons at a time wearing face coverings. Flow of foot traffic on a floor should be maintained in one direction where possible. Safeguarding hand washing practices and hand sanitizer use must be observed.
12. Within laboratories a minimum of 6ft physical distancing must be maintained at all times. In special work areas where 6ft distancing is not possible, personnel must adopt Wolff Center guidelines for ‘close contact with an asymptomatic patient’* (current guidelines: minimum of standard surgical ASTM level 1 mask [not N95] and eye protection; gowns and gloves may be required for specific research procedures).
13. In laboratories where it is necessary to decrease personnel density to maintain physical distancing, the development of shift work scheduling is strongly encouraged (e.g three 6-hour shifts or two 8 hour shifts). Laboratory PIs can determine their own shift schedules, and shift desynchronization with other laboratories on the same floor will potentially minimize interaction in hallways and communal areas. Personnel, in consultation with their PI, must agree to specific shift assignments, including weekend activity, and work within contracted weekly hour limits (including any remote work).
14. After each use and at the end of any shift period or workday personnel must wipe all actively used shared surfaces and equipment with appropriate cleaning or disinfectant materials.

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15. In-person research meetings are strongly discouraged and should be conducted using internet-based platforms as the first option. If there is no alternative to an in-person meeting, a minimum of 6ft physical distancing must be maintained and limited to 10 personnel.

16. Upon notification of a confirmed positive Covid-19 individual, areas where the person has visited in the 48 hrs before emergence of symptoms, or before notification of a positive test, (whichever is the more recent) must be prepared to close for up to 24 hrs and appropriate cleaning and disinfectant procedures undertaken. Any personnel that meet the CDC and UPMC Wolff Center criteria for ‘close contact’** with the Covid-19 positive individual must undergo a 14-day quarantine period and test Covid-19 negative before returning to the research environment.

17. In the event of future outbreak cases, the University will, if directed, return to an ‘essential personnel’ and remote work environment within a three-day period (including weekends).

18. Each laboratory PI and/or consolidated research units (e.g. open lab areas) will be required to complete a provided templated plan/checklist that is shared with all laboratory personnel and approved by the institute director, division chief, or chair prior to restarting research. Individual laboratory PIs are accountable for the compliance of their personnel in their own laboratory space, in shared laboratory space, and in the research building in general. Institute directors, division chiefs, chairs, and deans are accountable for compliance of all the PIs and laboratories within their appropriate research unit.

19. For the safety of all personnel in the research environment, any individuals or laboratories found to be persistently non-compliant in the directives listed above may have badge and facility access revoked at the discretion of the institute director, division chief, or chair.

* The following are the required PPE for personnel who will be coming into close contact (<6 feet for >5 minutes) with any patient who is not suspected of being infected with COVID-19.
  - Patients should be masked regardless of symptoms
  - Health care providers should wear standard surgical mask (not N95) and eye protection only if patient cannot or will not don surgical mask
  - Sterile gown (procedures only)
  - Sterile gloves (procedures only)

** Note: personnel adhering to guidelines above would minimize the risk of being considered a close contact.

The CDC defines close contact for healthcare exposures as follows: being within approximately 6 feet (2 meters), of a person with COVID-19 for a prolonged period of time (such as caring for or visiting the patient; or sitting within 6 feet of the patient in a healthcare waiting area or room); or having unprotected direct contact with infectious secretions or excretions of the patient (e.g., being coughed on, touching used tissues with a bare hand). Five (5) minutes is being used by the Wolff Center to define prolonged period of time. Brief interactions are less likely to result in transmission; however, clinical symptoms of the patient and type of interaction (e.g., did the patient cough directly into the face of the HCW) remain important factors to consider. PPE used by HCW, and whether aerosol-generating procedures where performed are all factors to consider in determining exposure risk.