The enclosed series of questions are designed to guide principal investigators through a self-examination of pandemic preparedness for their research.

There are two scenarios that must be considered when developing answers to these questions. The first is the possibility that sustained human-to-human transmission of a pathogen may lead the University to enact social distancing as a public health measure. Social distancing in this context is defined as the avoidance of congregate settings (e.g. classrooms, campus activities, offices, laboratories). In this scenario, distance learning and working-at-home will be strongly encouraged, in-person classroom instruction is likely to be suspended, and students in residence halls could be sent home.

The second scenario is a suspension of normal University operations due to widespread illness in the Pittsburgh region. In this scenario, excessive absenteeism is anticipated, in-person classroom instruction would be suspended, building support personnel would be minimized, public transportation may be minimal, and emergency response capability may be reduced.

For updated details on the status, Pitt’s Office of Public Safety and Emergency Management is the central resource.

Advance planning will allow everyone in your research group to focus on their own efforts and work together as a team, rather than wondering how they and their team members are to proceed. Even if such plans are not needed for the current situation, they are still a good learning experience for the future.

Critical functions to support or maintain are:

- Human health, welfare and/or safety.
- Information technology services or security.
- Building or property security, safety, and integrity.
- Research animals, specimens, or equipment.
- Critical infrastructure (power, water, heat, liquid nitrogen/coolants, roads, etc.).
- Critical business, contractual, or legal obligations including employee payroll

Section 1. General

Do you have up-to-date contact information for all your group members (including home phone numbers,
mobile telephone numbers, and home e-mail addresses)? Designate points of contact so everyone receives timely information.

Have you designated essential personnel? If you are unsure of who in your research project is designated emergency personnel, work with your department administrator or an equivalent administrator to identify such personnel.

Do you or any of your staff have clinical responsibilities that could preclude your research duties during a pandemic? Patient care responsibilities typically take priority in a pandemic event.

Have you documented a list of critical operations that must be completed on a daily or routine basis to maintain the integrity of your key research initiatives? This should not be a list of every activity in your lab, but rather a list of critical functions necessary to ensure continuity and security of key research initiatives.

Have you determined the minimum number of staff necessary to complete these critical operations? For example: one person working for four hours at least three days a week.

Do you back up electronic data, is your data portable, and can data be accessed remotely by authorized personnel? Such data includes: data analysis, literature reviews, writing proposals, reviews, or research papers, writing the background sections of theses, computational work, meetings, discussions, etc.

Do you have a plan to save samples? If you are carrying out a long-term experiment and if it is feasible to freeze samples at specific steps, you might consider doing this more often.

Do you have a plan to prioritize work that can only be carried out in your research facility? Stockpiling results and data now that could be analyzed remotely in the future is a potential option that might create future flexibility.

Are you aware of all proposal or grant-related deadlines? Sponsor guidance should be followed. Contact the program officer for assistance if no information from the sponsor is available. The Office of Sponsored Programs (OSP) maintains information related to COVID-19 from funding sponsors, including federal agencies.

Do you utilize students to support critical research operations? Consider that students could be asked to enact social distancing at an earlier stage in University response.

Is your staff sufficiently cross-trained to complete critical laboratory operations?

How long will your inventory of existing consumable supplies last for critical operations in your lab? Be prepared to sustain research, but please do not hoard critical supplies like masks.

If you have supply contractors that are not part of the University’s central supply chain, do you have alternate vendors that can deliver critical supplies?

Is there equipment necessary to sustain critical lab functions that is not on emergency power? List the equipment currently on emergency power in your lab(s), and develop a plan to access emergency power if critical to lab functions.

Which non-critical equipment can be shut down for long periods of time (1 week or more)?

If given a few days to prepare for the temporary suspension of normal operations for a period of several
weeks, what steps are necessary to ensure continuity and security of your research?

Do you supervise a core facility or other similar facility that provides research support to other investigators? If so, collaborate on a contingency plan.

Should you cancel planned research-related travel such as to a conference, site visit, or other laboratory? Not necessarily. For more details, review the Public Safety and Emergency Management page.

**Section 2. Animal research**

Do your research animals require specialized food, water, treatment and/or medication? If so, what volume of specialized inventory is present and is it sufficient for projected conditions?

Do you work with animal species that are susceptible to pathogens of concern for pandemics (such as influenza)? If so, are extra precautions necessary to mitigate potential transmission of the related pandemic pathogen from personnel to research animals?

Is your staff sufficiently cross-trained to complete critical animal support functions and operations currently performed by your lab personnel, and do they have access to the housing facility? Include any cross-trained personnel on the appropriate IACUC protocol.

Have you considered the impact to your animal models of 40% absenteeism among your staff and among the DLAR staff due to illness?

If your research team is relatively small, have you planned for the impact of 100% absenteeism among your team? Consider this in the context of limited DLAR support due to increased absenteeism among DLAR staff.

Have you considered means to reduce the required husbandry for your animals in an emergency scenario, including decreasing animal census numbers, ceasing breeding activities, and eliminating exposure of animals to biological or chemical hazards?

Have you identified a mechanism to identify and safeguard animal strains deemed to be most critical in periods when normal operations are not feasible?

Do you supervise a breeding protocol and what are the impacts of a pandemic on maintaining this function?

If necessary, do you have a plan for depopulating your animal colony? Prepare an estimate of the resources required to replace these animals.

**Section 3. Human subject research**

If you work with human study subjects or human patients as part of your research, have you considered that this research could be impacted or suspended due to fear and/or illness among the population?

What are your plans to contact subjects prior to their scheduled visits to evaluate their health status and
possible exposure to COVID 19?

What are your plans to delay or modify the study visit if the research subject acknowledges possible exposure to or symptoms of COVID 19?

If human subjects report to a designated facility for your research, have you identified an alternate site where the research can be accomplished? For example, a healthcare facility may be inaccessible for certain visitors or functions in a pandemic scenario.

Have you considered if it is possible to reduce the number of subjects/patients or the frequency of sessions with subjects/patients in the case of a pandemic emergency?

Do you maintain up-to-date contact information for subjects/patients? Is this information remotely accessible to authorized personnel?

Pitt’s Human Research Protection Office (HRPO) website provides additional information regarding COVID-19 related questions about human subjects research.