

## **Research Advisory Task Force (COVID-19)**

*Committee Topic:* Basic Science Research

*Committee Members:* Z. Vujaskovic, I. Jackson, E. Rose-Fown, R. Eckert, R. Ernst, J. Kaper, P. Swaan and S. Dorsey

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### **Final UMB policy based upon the committee report and recommendations**

Laboratories and core facilities should immediately begin to implement a significant transition from normal operations, and should rapidly move to protect people and research programs, as well as key reagents and equipment.

#### **Moderate Research Restrictions – in effect immediately**

##### **Implement immediate plans for social distancing in labs**

- The first, and immediate goal, is to reduce the number of personnel in laboratories and research programs. This action should be directed toward significantly reducing laboratory personnel interactions within the next four days.
  - In this moderate phase, work in every laboratory should be staggered so that only a minimum number of all laboratory personnel are present at any one time (e.g. <3) and assuming that 6 feet of social distance can be maintained. In the case of open lab situations, in general, no more than 30% of the total number of personnel should be in the lab at any given time—this should be coordinated across the lab group PIs. PIs will be responsible for establishing a rotation to avoid overlap that exceeds this quota in the lab at any time. When determining the appropriate size of your lab’s “skeleton crew” please also consider any equipment that might require gas or cryogen monitoring/service.
  - In situations where personnel cannot maintain social distancing due to small workspaces, the following personal protective equipment (PPE) precautions (e.g., face mask, gloves, gowns, shoe covers, no exposed skin) should be taken.
  - Plan for most personnel should include plans to complete work remotely.
  - Even minor symptoms of illness, including but not limited to cough or fever ( $\geq 100^{\circ}\text{F}$ ), should cause the person to stay home. If in doubt about whether one feels normal, do NOT come to work and notify PI or responsible individual.

- In anticipation of implementation of the Severe plan, each PI should appoint 1-2 essential employees (e.g., animal care, specialized instrumentation, cell line work) and back up employee(s). Per UMB, the essential employees will have the designation of “1”.
- Each PI should compile a up-to-date contact sheet for faculty, staff, students, and postdocs to ensure appropriate, clear communication. Review contingency plans and emergency procedures within your group.
- Immediately consider cross-training research staff to fill in on performance of essential tasks for others who may be out sick or unable to come to work.
  - Ensure staff have the appropriate training and consider sharing responsibilities across labs as able, depending upon specific expertise required.
  - Consider documenting critical step-by-step instructions.
- PIs should immediately identify essential research experiments which are at a critical phase, meaning that abandoning them would cause a major or irreversible loss in project viability. This high priority work should be a very limited set of the current laboratory bench-based experimentation.
  - Critical experiments include maintenance of cell lines (plan for freezedown when able), maintenance of essential equipment/instrumentation, and breeding/weaning/genotyping of irreplaceable transgenic and knockout rodent lines.
  - Examples of non-critical experiments would be those related to a publication arising, preliminary data for a grant application, or desire to continue individual programs of research without disruption.
  - All PIs are encourage to send materials to appropriate animal care facilities, such as Jackson Laboratories such that irreplaceable transgenic and knockout rodent lines are frozen down for rederivation if necessary.
  - PIs should provide their Department Chair or Division Director notice of critical experiments that must be continued, including justification. This can be done via email, or via an online survey (to be developed).
- PI’s should immediately identify experiments that can be ramped down, curtailed, or delayed.
- No increase in cage counts will be permitted and breeding should be reduced to the minimum possible.
- No new experiments should be initiated without prior approval from the Department/Division/Center Chair/Director until the trajectory of the infection becomes clearer.

- Consider setting up a lab teleconference account through Zoom account (zoom.us), Skype, or WebEx so that scientific interactions and discussions about research projects can occur regularly, even though most people may be at a distance. Also consider setting up VPN as necessary for communication and access to files, etc.
- All laboratory research specifically related to COVID-19 should continue, unless otherwise notified.
- Please consider that reagents, supplies, and animals may be on backorder, or unavailable, or delivery delayed or suspended.
- Disinfection of common laboratory areas and touch points with 70% ethanol (e.g. doorknobs, sink handles, freezer doors, telephones) should occur at least twice daily.
- Ensure that high-risk materials (radioactive, biohazards, chemicals) are secured. If you need assistance, contact EHS:  
<https://www.umaryland.edu/ehs/> or 410-706-7055.

**Severe Research Restrictions: Not currently in effect at UMB but imminently possible**

In Moderate Research Restrictions, we sought to accomplish the immediate migration of research activities away from direct bench work, in order to prepare to secure as much as possible by March 20, 2020. In Severe Research Restrictions, we expect that you will curtail all activities not critical to maintaining animals, unique reagents/cell lines and essential equipment, at which point only 2-3 essential personnel (designated by the PI) will be allowed in the lab and should be according to a defined employee schedule that ensures appropriate staggering. *Selection of essential personnel should also include careful consideration of personal/family obligations and health concerns to the extent possible.* Possible exceptions for additional personnel will be made on a case-by-case basis. Moreover, exceptions regarding extension of the timing to conclude rampdown of essential experiments must be discussed with the Department Chair/ADR for each PI and approved in writing. Updated information on COVID-19 and UMB will be found at all times at <https://www.umaryland.edu/coronavirus/>.

In order to ensure clear, frequent communication, each PI should adhere to the following chain of communication, which will be bi-directional:

Team members report to the PI

Individual PIs will report to Department/Division/Center Chair/Director

Department/Division/Center Chair/Director will report to the school ADR

The ADR will report to the Dean/President

- Essential personnel will only perform critical procedures, processes, or equipment management that requires regular attention to maintain laboratory viability (e.g. liquid

nitrogen tank filling, critical cell line passage, animal support). Cell lines that can be frozen down should be completed during the Moderate Restrictions period.

- PI's should clearly define processes and procedures for shutdown of expensive and sensitive equipment, particularly if long shutdown might be harmful to the equipment. PIs may want to contact the appropriate vendor to ensure that this is accomplished according to manufacturer SOPs. For other equipment that cannot be shut down, it may be necessary to arrange for vendor support during this Severe Restrictions period.

Do not make changes regarding the employment of staff, students, and postdocs. NIH guidance has suggested that grants will continue to be charged as normal. Thus, no new personnel actions should take place during the Moderate or Severe Restrictions period.

Information on clinical research operations will be provided separately.

### **Personal protective equipment and essential supplies**

Due to the likelihood of a virus surge that overwhelms the current capacity of the healthcare system, PIs should take an inventory of personal protective equipment (PPE; e.g. face masks, gowns, gloves, etc.) and other critical supplies/reagents that could be made available to UMMC/UMMS on short notice or as necessary.

### **Decontamination of laboratories**

If members of a lab are confirmed positive for COVID-19, guidance from UMB will be forthcoming as to recertification of laboratories and decontamination steps that should occur.

### **Public safety issues**

PIs should be aware that if the federal, state or local government restricts travel, there may be additional guidance from UMB regarding who is and is not allowed on campus, who will be able to drive, and whether security personnel will limit the number of persons entering a building/lab.

### **Deliveries including BIORESCO**

For BIORESCO, if critical supplies are needed, staff members should pick up items instead of requesting delivery in order to limit exposure and no signing for supplies should be required. For Airgas and other essential services, access to building should be established if not already done. FedEx and UPS should drop off to a designated area in each building (e.g., the security desk) usually a lobby area. Each package should be quarantined for 48 hours prior to the PI or designee picking the package up from this area OR the package should be wiped down with 70% ETOH prior to removal and handled with gloves. All handled materials should be disposed of properly to prevent additional contact with other individuals.