Perelman
SCHOOL OF MEDICINE
UNIVERSITY *of* PENNSYLVANIA

Guide for the safe **RETURN** to **CAMPUS**

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INTRODUCTION AND GUIDING PRINCIPLES

Dear Colleagues,

The novel coronavirus, SARS-CoV-2, has impacted every aspect of our lives, and our response as a School, a University, and a Nation has been true test of and testament to our strength and resilience.

During the gradual return to campus, the safety of our entire community – our health care providers, our staff, our faculty, our students, our trainees, and our patients – remains our highest priority, and together we must continue to limit the spread of the virus and safeguard the local environment.

Over the course of several weeks, the Perelman School of Medicine (PSOM) has been preparing and developing this guide for the safe and gradual return to campus. Composition of this document has involved faculty and staff working across multiple teams focused on recommendations around education, personal protective equipment, supplies, facility operations and sanitation, flow of personnel, communications, and individual lab resumption planning. This has been coordinated in close partnership with the University's Office of the Vice Provost for Research (OVPR), Health System, Environmental Health and Radiation Safety (EHRS), and University Laboratory Animal Resources (ULAR).

In combination with robust resources from the Centers for Disease Control and Prevention (CDC), OVPR, and EHRS; informed by the expertise of our faculty in Medicine, Epidemiology, Virology, Public Health, and Medical Ethics; and illuminated by feedback we have received directly from the community from various town halls and surveys, we have curated and developed protocols and guidelines for the gradual and safe return to campus.

Please refer to this guide regularly as you establish new measures to safeguard your learning, teaching, and working environment, and please recognize that as our understanding of COVID-19 continues to evolve, we will continue to re-gauge, reset, and refine our procedures and plans as appropriate and necessary.

Thank you for all of your efforts.

Jon Epstein, MD
Executive Vice Dean and Chief Scientific Officer

SAFE RETURN TO CAMPUS

Overarching Expectations

As we plan for the gradual return to campus, all faculty, students, and staff are expected to comply fully with existing policies and procedures, including those outlined in this document. We emphasize the need for each person's help locally to ensure we are doing things as safely and as carefully as we can, making sure absolutely that we remain at or below 20% density in any given area during the initial ramp-up of research activities, with the exception of areas focused on COVID-19 research. The 20% density must account for all people on the floor/in the building, including housekeeping, facilities, and animal care staff.

On May 20, the University approved initiation of Phase I (of three phases) Research Resumption on June 1, 2020. During the voluntary phases of ramping up, all Principal Investigators (PIs) with wet bench research programs must complete an individual lab resumption plan. Upon approval first by the department chair and/or center/institute director (in particular, the relevant leadership who manages the space for the respective laboratory/program should approve the request), the plan and the approval should be provided to the Executive Vice Dean and Chief Scientific Officer (EVD/CSO). This plan will be accessed via a personalized link that you will receive via email and will address some of the following:

- All students, staff, and post-docs returning to work on-site are doing so voluntarily;
- The plan includes detailed logistics regarding social distancing;
- The plan includes provision of personal protective equipment for all working on-site;
- The plan is coordinated with and approved by department/center/institute leadership, and is incorporated in that entity's plan for 20% density; and
- The plan follows all current University and School guidance for resumption of research activities

Upon approval of the lab resumption plan by the department chair and/or center/institute director, the PI or Lab Safety Coordinator must complete the Resumption of Research Notification webform on the EHRS website.

At any time, the decision to ramp down again may be necessary due to any number of factors, including a surge in new cases, changes to the 'stay at home' rules, etc. A return to ramp down phase will be implemented in accordance with the terms of this document.

Phased Staffing and Gradual Ramp-up of Research Activity

At the time of publication of this document, PSOM remains in the phase of essential work only ("Ramp Down" phase in the chart on the next page, courtesy of the OVPR Research Resumption Strategy Master Plan). The plan has three distinct phases:

Phase I:	Increase of prioritized research, with enforced population density restrictions and telework continued.
Phase II:	Expanded scope of research operations, increasing the population with social distancing enforced, telework continued.
Phase III:	Return to full research operations, with new awareness and hygiene practices as the norm and telework utilized where possible.

SAFE RETURN TO CAMPUS

	Ramp Down	Phase I	Phase II	Phase III
Population density	<10%	20%	50%	100% new normal
Research type	Essential	Essential + prioritized	Approved	All
Travel (per Penn policy)	None	None	Approved field research only	According to university policy
Telework	Most activity done remotely	All that is possible	All that is possible	When reasonable
Hygiene Masks, etc.	Required	Required CDC recommendations	Required CDC recommendations	
Undergrads	No	No	No	Yes
Grad Stud/Postdocs	Essential only	Voluntary	Voluntary	Yes

As outlined in the OVPR Research Resumption Strategy (May 2020), PIs should schedule individual research groups in shifts, which will serve as an effective strategy to increase access while controlling population density. A typical shift structure has two or three people working in a lab or research space at different times during the day; at all times, no more than one person is allowed per bay. Although the number of people in the lab should be reduced, researchers must not work alone in the lab. Each PI is accorded the flexibility to design their own shift schedule (see below). Arrival and departure times of the shifts should not overlap, and there must be time in between shifts for proper cleaning of lab surfaces and equipment by the person leaving at the end of their shift.

Each PI can develop and choose among a number of different shift models, as the most appropriate model will depend on research area, animal work, staff preference and obligations, and space configuration. In some cases, hours extending into the night and/or weekends will be necessary, and such plans will need to be communicated to the department chair and/or center/institute director and to the EVD/CSO. To that end and to help with social distancing, we are creating building operations and security screening schedules to support the flexibility in arriving after normal business hours and/or weekends. Especially during the gradual ramp-up of research activities, we ask every PI and program to be cognizant of personal circumstances, such as child and elder care and transportation limitations.

Examples of three shift models as outlined by one of our peer institutions[1] for consideration:

Shift model A – divide the day
The day is divided into two shifts. Every lab member is assigned to an AM or PM shift. Individuals can only come in during their shift. Two 4-hour shifts may not be realistic for many labs. Time windows that allow closer to 8 hours per shift (e.g., 6:00 AM – 1:00 PM—lab does wipe down on exit; 2:00 PM – 10:00 PM—lab does wipe down on exit) may be possible but should address the operation's ability to support extended hours and accommodate any lab member. Plans should include a time buffer to ensure shift changes occur without cross-contact.

Shift model B -divide the week
The week is divided into two shifts. The easiest division to imagine is MonWedFri/ TueThuSatSun but other divisions are possible (Sun – Wed and Thu – Sat). This allows longer workdays for experiments that are not easily accomplished in 4- to 6-hour blocks. There is less daily concern about (and friction over) overlap. However, some people would always be working on the weekends.

Shift model C - somewhat longer blocks
A 15-day period could be divided into three blocks. Lab personnel (or physically proximate groups) are divided into three pods. Pod A works on campus the first 5 days and then works remotely for the next 10 days. Pod B works remotely the first 5 days, on campus the next 5 days, and then remotely the last 5 days. Pod C works remotely the first 10 day and then on campus for the last 5 days. That ends a 15-day period. This strategy is designed to even more strictly isolate work units.[1]

Whichever model works best for a PI, lab, and program, shift models need to be coordinated across 'functional' units of an area so that 20% density is maintained. We also ask that as best as possible, we stagger arrival and departing times to minimize any congestion at common entry/exit points of our buildings.

Continuation of remote work for all who are able to fulfill work responsibilities from home will remain in effect during all three phases. This will help to control the amount of people on campus and help to reduce the potential spread of COVID-19. Please see sections "Working from Home," "Leading Remote Workers," and "Resources for Access Technology" for helpful tips and resources to support remote work.

Participation of graduate students and postdocs is voluntary. As part of the OVPR's Research Resumption Plan, individual schools and graduate groups, in collaboration with the School's Graduate Deans, are responsible for establishing processes for students to opt-in to research. The opt-in process should not involve faculty mentors; trainees should be allowed to decide independently. In addition, we strongly encourage scheduling flexibility in consideration of childcare, elder care, transportation concerns, and safety.

The opt-in process will reside in their home school, and the list will be maintained at the PSOM level. Even if an individual opts-in, it does not necessarily mean the individual can return to campus. Those opt-in individuals will need to independently coordinate with their PI/mentor about returning to campus and synchronizing with the PI's individual lab resumption plan. The opt-in process will be communicated to those impacted shortly [see appendix for information].

Before entry at every building, there will be the following signage with the expectation that each person entering will attest prior to their arrival to campus each day:

I am symptom-free (including self-administered temperature check), consent to the opt-in health policy, and agree to comply with all safety measures on and between campuses, both inside and outside buildings

[1. Source: https://provost.harvard.edu/files/provost/files/harvard_university_research_laboratory_re-entry_plan_5.14.20.pdf]

SAFE RETURN TO CAMPUS

PSOM requirements for Individual Lab Return to Research during Phase I as defined by the OVPR and guided by EHRS are as follows:

1. Review OVPR's [Research Resumption Plan](#)
2. Review and complete [EHRS Research Resumption Checklist](#) (see page 33)
3. Complete EHRS COVID-19 Research Resumption training, found here: [Knowledge Link](#)
4. Familiarize yourself with and inform staff members of EHRS [guidance for suspected or confirmed cases of COVID-19](#)
5. No individual is required to return during Phase I. Ensure that all personnel are able to meet personal obligations and are willing to return to campus on a voluntary basis
   - Graduate Students and Postdocs must complete the separate confidential opt-in process (see more information in appendix)
6. Ensure returning lab members are current on all required KnowledgeLink training requirements
   - HIPAA training must be current for all returning lab members, including the PI
7. Identify approximate lab space that can be in use at any given time within the 20% occupancy limitation. This is a maximum of 1 person per bay, but may be less depending on your building's occupancy limits
8. Establish lab calendar to ensure appropriate social distancing within your lab and across the floor
   - Where possible, set schedules to minimize need for food breaks, common area use, and minimize use of high touch-point equipment such as microwave ovens, shared refrigerators, etc.
9. Acquire necessary [PPE as required by CDC and EHRS guidelines](#)
10. Acquire necessary [cleaning and sanitation supplies](#)
11. Coordinate with occupants of your research floor(s) to ensure appropriate social distancing is maintained throughout the space
12. Establish a cleaning/sanitation plan for lab benches throughout the day, between shift changes, etc.
13. Establish a cleaning/sanitation plan for equipment within the lab and shared equipment across the floor and/or used in other locations
14. Establish onboarding plan for individuals who may be new to the lab, are learning new procedures, etc.
15. Ensure all lab procedures are available via a shared electronic platform to minimize the need for close contact
    - Consider opportunities to revise procedures requiring multiple people, evaluating opportunities to limit the need for close contact
16. Identify those research projects in your lab that are essential or prioritized based on OVPR guidance for Phase I
17. During Phase I, the ability to scale up animal care and housing may be limited by ULAR staff capacity
18. Identify anticipated use of core facilities and work collaboratively with appropriate core leadership to ensure capacity for your planned activities
19. Complete PSOM Lab Resumption Plan (see next page)
20. Complete [EHRS notification webform](#)

SAFE RETURN TO CAMPUS

Phased Staffing and Gradual Ramp-up of Research Activity (continued)

Before the return to campus, each PI with a wet bench research program will be required to submit an individual lab resumption plan. This plan will be accessed via a personalized link. Upon approval first by the department chair and/or center/institute director (in particular, the relevant leadership who manages the space for the respective laboratory/program should approve the request), the plan and the approval should be provided to the EVD/CSO. The below is a screenshot of the template:

Penn Medicine

Return to Lab

Lab

How many bays or equivalent are assigned to you?
* must provide value

How many lab members do you have?
* must provide value

How many lab members would return in phase 1?
* must provide value

Does this include non-essential personnel?
* must provide value

○ Yes
○ No

Date Proposed for Phase 1 Lab Staff Additions?
* must provide value

What shift(s) do you anticipate occupying your lab space?
(Please select all that apply)
* must provide value

☐ Monday-Friday, 7am-7pm
☐ Monday-Friday, 7pm-12am
☐ Monday-Friday, 12am-7am
☐ Saturday-Sunday

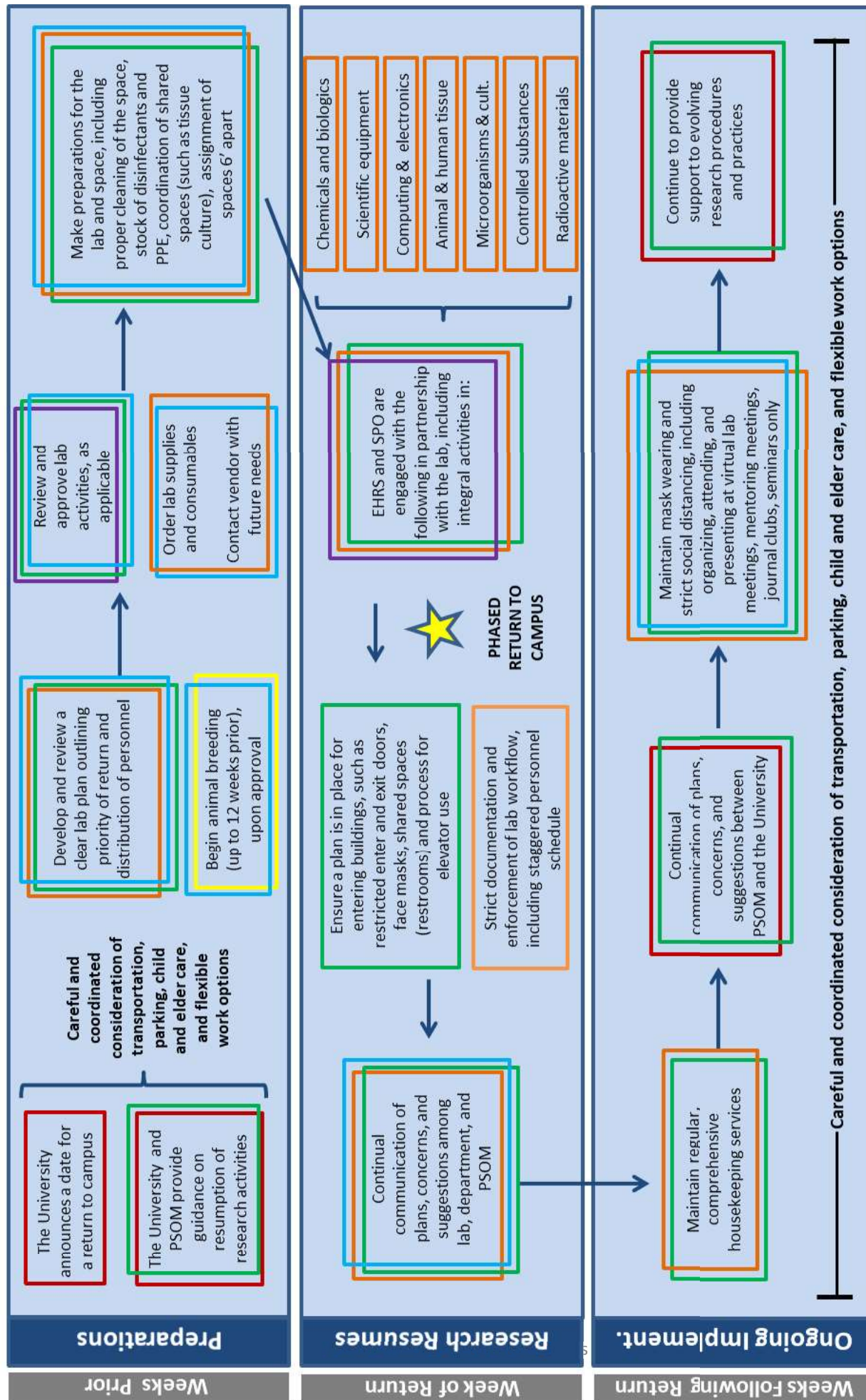<< Previous Page   Next Page >>

The chart below outlines some high-level process steps to consider as you plan for your resumption of research activities.

RESUMPTION of RESEARCH ACTIVITIES [recommended steps]

Preparations — Weeks Prior

- The University announces a date for a return to campus
- The University and PSOM provide guidance on resumption of research activities

Careful and coordinated consideration of transportation, parking, child and elder care, and flexible work options

- Develop and review a clear lab plan outlining priority of return and distribution of personnel
- Begin animal breeding (up to 12 weeks prior), upon approval
- Review and approve lab activities, as applicable
- Order lab supplies and consumables
- Contact vendor with future needs
- Make preparations for the lab and space, including proper cleaning of the space, stock of disinfectants and PPE, coordination of shared spaces (such as tissue culture), assignment of spaces 6' apart

Research Resumes — Week of Return

- Continual communication of plans, concerns, and suggestions among lab, department, and PSOM
- Ensure a plan is in place for entering buildings, such as restricted enter and exit doors, face masks, shared spaces (restrooms) and process for elevator use
- Strict documentation and enforcement of lab workflow, including staggered personnel schedule

★ PHASED RETURN TO CAMPUS

- EHRS and SPO are engaged with the following in partnership with the lab, including integral activities in:
  - Chemicals and biologics
  - Scientific equipment
  - Computing & electronics
  - Animal & human tissue
  - Microorganisms & cult.
  - Controlled substances
  - Radioactive materials

Ongoing Implement. — Weeks Following Return

- Maintain regular, comprehensive housekeeping services
- Continual communication of plans, concerns, and suggestions between PSOM and the University
- Maintain mask wearing and strict social distancing, including organizing, attending, and presenting at virtual lab meetings, mentoring meetings, journal clubs, seminars only
- Continue to provide support to evolving research procedures and practices

Careful and coordinated consideration of transportation, parking, child and elder care, and flexible work options

PRIMARY RESPONSIBILITIES:

- University
- EHRS
- ULAR
- PSOM*
- Department / Program
- Principal Investigator and lab personnel

*includes Space Planning and Operations, Housekeeping, Distribution Services, Security, EVD/CSO

TRANSPORTATION AND PARKING

We understand the concerns around public transportation and commuting to and from work, and we are working closely with the University on this. If possible, try to avoid crowded public transportation.

At present, parking fees at University parking lots and transient garages (Chestnut 34, Walnut 38, Walnut 40 and Penn Museum – starred in the below map) have been waived due to the unprecedented public health crisis related to COVID-19. This waiver is available to all individuals who have a valid University of Pennsylvania or UPHS-issued ID card. ID cards issued by Penn's affiliated hospital, practices, and institutions are also eligible for this waiver.

Other parking customers may park in Penn's lots and garages at temporarily reduced rates.
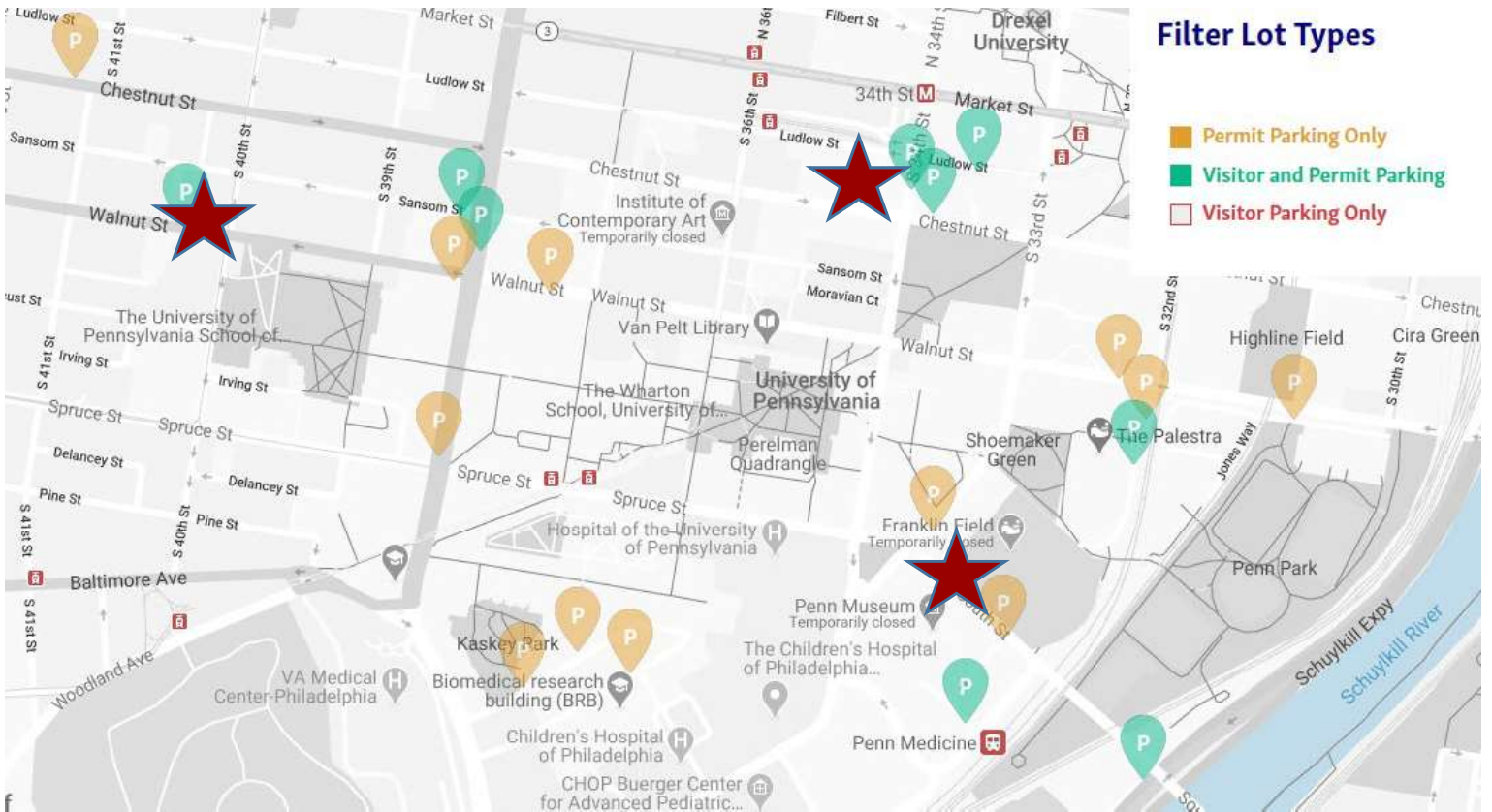
Effective April 13, LUCY's (Loop Around University City) Green and Gold routes will operate every 30 minutes. Combined routes offer service every 15 minutes. More information is available at http://septa.org/covid-19/service-information.html. An updated schedule can be found here.

The Penn Car Share program, which includes van and car pooling options and benefits, continues to run.

TRANSPORTATION AND PARKING

Walking Escort Services

Uniformed Allied Universal Public Safety Officers provide walking escorts to all campus locations. Officers are dispatched by radio and will accompany you from one campus location to another, to your parked vehicle, to a Penn Transit Stop or to an on-campus SEPTA regional transit stop.

Available 24 hours a day, 365 days a year, between 30th to 43rd Streets and Market Street to Baltimore Avenue.

Escorts also extend west to 50th Street, and north/south from Spring Garden to Woodland Avenue, between 10 a.m. and 12 a.m. via the University's partnership with the [University District Ambassador Program](#).

How to Request a Walking Escort:

- Ask any Public Safety Officer on patrol or inside a building
- Call **215-898-WALK(9255)** or 511 (from campus phone)
- Use one of the many building and blue-light phones located on and off Penn's Campus

HEALTH AND SAFETY GUIDANCE

How to Protect Yourself and Others

The following are recommendations from the Centers for Disease Control and Prevention (CDC), which we strongly encourage you to review [please refer regularly to the CDC website for the most up-to-date information]. We underscore the importance of adhering to all guidelines of personal hygiene, personal protective equipment, and social distancing in every campus setting as well as in your interactions outside of the workplace. As guidance is continually updated, we strongly recommend you refer to the guidelines from EHRS.

Know how it spreads
- There is currently no vaccine to prevent COVID-19.
- **The best way to prevent illness is to avoid being exposed to this virus.**
- The virus is thought to spread mainly from person-to-person.
  - Between people who are in close contact with one another (within about 6 feet).
  - Through respiratory droplets produced when an infected person coughs, sneezes or talks.
  - These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
  - Some recent studies have suggested that COVID-19 may be spread by people who are not showing symptoms.

Everyone who comes to the workplace must:

Wash your hands often
- Wash your hands often with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, or sneezing.
- If soap and water are not readily available, **use a hand sanitizer that contains at least 60% alcohol**. Cover all surfaces of your hands and rub them together until they feel dry.
- **Avoid touching your eyes, nose, and mouth** with unwashed hands.

Avoid close contact
- **Avoid close contact with people who are sick, even inside your home.** If possible, maintain 6 feet between the person who is sick and other household members.
- **Put distance between yourself and other people outside of your home.**
  - Remember that some people without symptoms may be able to spread virus.
  - Stay at least 6 feet (about 2 arms' length) from other people.
  - Do not gather in groups.
  - Stay out of crowded places and avoid mass gatherings.
  - Keeping distance from others is especially important for people who are at higher risk of getting very sick.

[Source: CDC https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html]

HEALTH AND SAFETY GUIDANCE

Cover your mouth and nose with a cloth face cover when around others

- You could spread COVID-19 to others even if you do not feel sick.
- Everyone should wear a cloth face cover when they have to go out in public, for example to the grocery store or to pick up other necessities.
  - Cloth face coverings should not be placed on young children under age 2, anyone who has trouble breathing, or is unconscious, incapacitated or otherwise unable to remove the mask without assistance.
- The cloth face cover is meant to protect other people in case you are infected.
- Do NOT use a facemask meant for a healthcare worker (e.g. N95 mask).
- Continue to keep about 6 feet between yourself and others. The cloth face cover is not a substitute for social distancing.

Cover coughs and sneezes with your arm or tissue

- **If you are in a private setting and do not have on your cloth face covering, remember to always cover your mouth and nose** with a tissue when you cough or sneeze or use the inside of your elbow.
- **Throw used tissues** in the trash.
- Immediately **wash your hands** with soap and water for at least 20 seconds. If soap and water are not readily available, clean your hands with a hand sanitizer that contains at least 60% alcohol.

Clean and disinfect

- **Clean AND disinfect frequently touched surfaces daily**. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks.
- **If surfaces are dirty, clean them.** Use detergent or soap and water prior to disinfection.
- **Then, use a household disinfectant.** Most common EPA-registered household disinfectants will work.

Watch for Symptoms

One of the most important steps in preventing the spread of respiratory diseases like COVID-19 is to stay home when you are sick or showing any of the following symptoms:

- Sudden loss of taste of smell
- Skipped meals
- Fatigue
- Fever
- Chills

- Persistent cough
- Diarrhea
- Shortness of breath or difficulty breathing
- Unexplained gastrointestinal pain

Please note that symptoms may appear 2 to 14 days after exposure to the virus. Notify confirmed or suspected COVID-19 cases to EHRS (215.898.4453, available 24/7).

[Source: CDC https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html]

HEALTH AND SAFETY GUIDANCE

We are currently using both the CDC guidelines and the Philadelphia Department of Public Health recommendations for employees who test positive for COVID-19 based on symptoms and not requiring a negative test to return to work.

> **Contact Tracing**: A reminder the EHRS is responsible for contact tracing of suspected/confirmed COVID-19 cases for Penn faculty and staff. Robust surveillance, case investigation, contact tracing and isolation of positive cases or quarantine of close contacts can slow and stop the transmission of COVID-19. Notify confirmed or suspected COVID-19 cases to EHRS (215.898.4453, available 24/7).
>
> For students, contact tracing is carried out by Campus Health at 215.746.3535.

The following are guidelines for returning to work for those who test positive:

- At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath); and,

- At least 10 days have passed since symptoms first appeared

Potential COVID-19 Exposure Concerns

For concerns about the impact of potential COVID 19 exposure on an underlying medical condition that presents a substantial risk of serious illness or complication following infection:

- Faculty should consult with Vicki Mulhern in Faculty Affairs to understand their options
- Staff and students should consult with PSOM Human Resources to understand their options

[Source: CDC (https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html)]

HEALTH AND SAFETY GUIDANCE

When You Must Stay Home

To safeguard yourself and our community, you <u>must stay home</u> if any of the following conditions apply:

- Anyone in your household has been diagnosed with COVID-19
- Anyone in your household has demonstrated symptoms within the last 14 days, including:
    - Sudden loss of taste of smell
    - Skipped meals
    - Fatigue
    - Fever
    - Chills
    - Persistent cough
    - Diarrhea
    - Shortness of breath or difficulty breathing
    - Unexplained gastrointestinal pain
- You have had close contact (within 6 feet for greater than 10 minutes) outside your home with someone diagnosed with COVID-19
- You have had close contact (within 6 feet for greater than 10 minutes) outside your home with someone who has symptoms of COVID-19 within the last 14 days

Penn COVID-19 Training

EHRS has developed two training programs. One is for essential support personnel entitled "Penn COVID-19 Training for Essential Workers;" available in KnowledgeLink, Course title: COVID-19 Training For Penn Essential Employees. Course code: COVID19ESSENTIAL

The second program, Resumption of Research Training for Lab Personnel, is also available in KnowledgeLink. Course title: Resumption of Research Training at Penn-EHRS. Course code: Resume Research

The course takes approximately 15 minutes to complete, and everyone returning to work must complete the training.

[Source: EHRS Resumption of Research Training and CDC Guidelines]
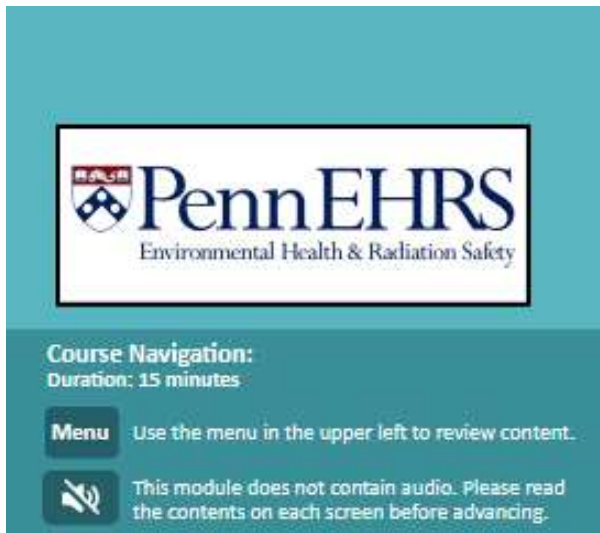
HEALTH AND SAFETY GUIDANCE

Personal Protective Equipment [PPE]

In accordance with CDC and Philadelphia Department of Public Health recommendations, all personnel and visitors entering Penn buildings, regardless of their role, must follow universal mask precautions. Masks, in conjunction with social distancing practices, are intended to limit the risk of the wearer exposing others to undetected illnesses or infections, including COVID-19.

Face coverings should:

- Fit snugly but comfortably against the side of the face
- Be secured with ties or ear-loops
- Allow for breathing without restriction
- And if using cloth face coverings:
  - Include multiple layers of fabric
  - Be able to be laundered and machine dried without damage or change of shape
- Masks with one-way exhalation valves are not acceptable and are not allowed to be worn on campus or in the laboratories

When removing a used face covering, individuals should be careful not to touch their eyes, nose, and mouth and wash hands immediately after removing.

[Source: EHRS Resumption of Research Training, CDC, and Penn Medicine Communications]

PERSONAL PROTECTIVE EQUIPMENT [PPE]

Universal Mask and Cloth Face Covering Precautions

Everyone entering Penn buildings, regardless of their role, must follow Universal Mask precautions. According to EHRS guidelines, unlike the CDC guidance for the general public, which recommends cloth face coverings, Penn personnel will be provided a variety of different styles of face masks, including cloth face coverings and surgical-style masks depending on mask availability in their organization. Any style of face mask provided by the University will meet the CDC's performance requirements.

Universal Masks

- **Two-ply** **100% cotton cloth face covering and or ear-loop/string tied or surgical- style masks will be utilized as universal masks**. The style of mask will depend on your organization. Surgical-Style masks are constructed in a similar manner as surgical masks but are not manufactured for clinical use or carry FDA approval. These masks are non-sterile.
- Surgical masks and N-95 respirators are acceptable but not required. In general medical/surgical face masks and respirators are in very limited supply and ideally be reserved for healthcare staff.
- Masks and face coverings are intended to limit the risk of the wearer exposing a coworker to undetected illnesses or infections, including COVID-19. Masks do not necessarily provide the wearer with extra protection.
- Universal masks **should be worn at all times by essential Penn personnel and should cover your nose and mouth**.
- Universal masks should be removed only for eating. See Removal/Storage below.
- Social distancing must be maintained even while wearing the mask.
- All respirators with exhalation valves, including N95 respirators, do not meet the requirements of Penn's Universal Mask Policy, because the exhalation valve allows unfiltered exhaled air to be released.

Temporarily Removing Universal Masks

- Masks and face coverings should *only* be temporarily removed when eating.
- Any time a mask is removed, it must be stored in a storage bag (see storage below).
- Do NOT place masks on counters, computers, etc.
- Avoid touching the outer surface while removing the mask.
- Perform hand hygiene (wash with soap and water or use hand sanitizer) after handling mask.

Mask Removal/Storage
Flat Masks, including cloth face coverings

- Carefully fold so that the outer surface is held inward and against itself to reduce contact with the outer surface during storage
- The folded mask can be stored between uses in a clean sealable paper bag. Do not use plastic.
- Label the paper bag with your name.
- Perform hand hygiene (wash with soap and water or use hand sanitizer) after handling mask.

[Source: EHRS https://ehrs.upenn.edu/covid-19/universal-mask-and-cloth-face-covering-precautions]
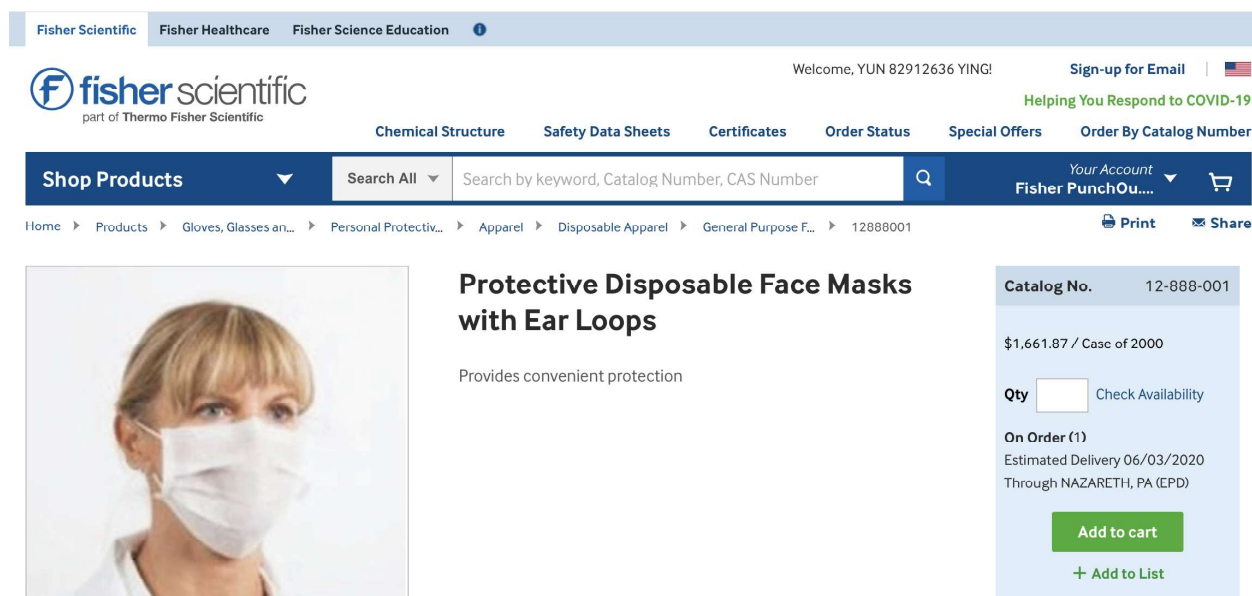
PERSONAL PROTECTIVE EQUIPMENT [PPE]

Supplying Your Own PPE

Individual labs are responsible for securing and providing their own PPE.

1. Programs are responsible for stocking lab supplies prior to restart of work. These supplies include all necessary PPE *and* surgical style masks in support of Penn's universal mask policy and hand soap, paper towels and disinfectant for use in the laboratories

2. All supplies should be ordered through Penn Purchasing and the Penn Marketplace

3. Penn purchasing coordinating directly with PSOM leadership to assure availability of supplies will provide weekly communications of material supply status, and in select instances will acquire back-up allocations of high demand materials

4. Any sourcing concerns should be raised to mgtalley@upenn.edu for resolution

5. Select vendors will warehouse orders for delivery once staff have returned to campus.

The following is a sample of options for obtaining PPE:

Courtesy of the Department of Medicine

PERSONAL PROTECTIVE EQUIPMENT [PPE]

Guidance related to lab hygiene and personal safety: PPE and cleaning supplies

For every lab member, the following PPE should be purchased, provided, and used:

Masks

- For most labs, CDC compliant cloth masks OR surgical masks (non-sterile)
- A mask should last at least two working days and should be replaced when torn or dirty

Mask storage

- One small paper bag should be provided to each lab member to store the mask

Face shields (optional or as needed)

- For use if social distancing cannot be maintained due to nature of work being conducted (i.e. lab procedures that require two or more people in a room within six feet of each other for a sustained (greater than 10 minutes) period of time)
- Should be used in tandem with a mask
- Cannot be used in order to increase lab occupancy or reduce social distancing requirement

Other PPE while in lab:

- Safety goggles or glasses (required)
- Lab coat (required)
- Gloves (required)
  - Must be removed and properly disposed whenever leaving the lab
  - At least a dozen pairs per person per day

Other supplies that should be on hand in the lab:

- Disinfectant – EPA approved disinfectant, like Vital Oxide
- If not available: bleach solution or 70% alcohol wipe (caution: flammable)
- Hand soap and paper towels for all lab sinks

LAB CLEANING AND DISINFECTION COVID-19 GUIDANCE

The following information on "what to clean and disinfect and when to do it" is provided by EHRS:

What Housekeeping is Responsible for Cleaning:

Housekeeping will clean high touch surfaces outside of the lab, including bathrooms, kitchens, break rooms, conference rooms, and elevators.

What Lab Personnel are Responsible for Cleaning:

Lab personnel are responsible for cleaning the surfaces in their laboratories and offices. See Approved Disinfectants and Use for products and instructions.

Labs:

Shared equipment in the lab must be disinfected **before and after** each use. Label or place a sign near the equipment with a reminder to do this. Place a spray bottle or disinfectant and wipes near the equipment. (Don't forget to properly label the bottle and keep a small trash can nearby for disposal of the wipes).

High touch surfaces in the lab must be disinfected at **start of and halfway through the workday**. Lab members should also clean surfaces at the end of each shift. Examples of high touch surfaces in the lab are:

Benchtops	Drawer and cabinet handles	Hand tools
Equipment handles and latches	Bin and water incubator lids	Faucet handles and sprayer grips
Equipment controls and touchpads	Outsides of shared chemical bottles and caps	Micropipettors and other shared tools
Baskets, bins, trays, etc.	Chair backs and arm rests	Pens, whiteboard markers, etc.
Door handles/knobs in the lab	Light switches [spray the wipe w/ disinfectant and wipe]	Hood sashes and airfoils

Equipment Corridors and Shared Equipment Spaces:

Shared facilities and equipment, including fume hoods and biosafety cabinets, procedure rooms, instruments, and instrument/resource facilities, will require coordination with other lab groups. A sign-up sheet or reservation system should be considered for managing this. Disinfect equipment **before** and **after** each use. This includes all touchable surfaces. Place a spray bottle with disinfectant and wipes near the equipment.

[Source: EHRS https://ehrs.upenn.edu/covid-19/lab-cleaning-and-disinfection-covid-19-guidance]

PEDESTRIAN FLOW AND SECURITY

Safety remains our highest priority, and we will continue to secure our buildings and require Penn ID for access. Entrance to PSOM facilities will be limited, as highlighted in the yellow boxes below, to the Biomedical Research Building, Johnson Pavilion, Stellar Chance, and Smilow. Controlled access readers at all other building entrances will be disabled, and these locations are to be used for exit only. You should not hold or prop open exterior doors for any other person. 24/7 access is available at Johnson Pavilion and the HUP main entrance.

Signage placards and floor signs are being installed to help guide staff, keep social distance, etc. Signage will include posting of every elevator lobby/elevator with restrictions for the number of occupants per elevator; please anticipate increased internal travel time. Stanchions may be used to help maintain social distancing.

All who enter our facilities must attest to their health status prior to their arrival to campus as noted below, wear masks per the Universal Mask Policy, and swipe Penn ID at the controlled access reader for entry; this action will create a list of all employees entering the PSOM. Masks for those who need them are temporarily available at the Stellar Chance lobby.

> **I am symptom-free (including self-administered temperature check), consent to the opt-in health policy, and agree to comply with all safety measures on and between campuses, both inside and outside buildings.**

PEDESTRIAN FLOW AND SECURITY

- In order to best manage/control access at this time and to assure adherence to the Universal Mask Policy, we will limit entry locations to the PSOM to Biomedical Research Building (BRB), Stellar Chance Labs, Johnson Pavilion, and Smilow Center for Translational Research.

- **Entry into the PSOM via the noted locations will require swipe of a Penn ID at the controlled access reader; this action will create a list of all employees entering the PSOM. Security will ensure that this process is single person entry only. A timed entrance schedule/system is under review.**

- Controlled access at all other building entries will be disabled, and all other building lobbies will be used as exit only.

- At this time, temperature screening will not be required for entry to PSOM facilities. **It is expected that PSOM employees will self-attest to health status; an IT reporting mechanism is being investigated.**

- We expect those who enter BRB and Johnson Pavilion to have PPE as needed. Those needing PPE can go to the Stellar Chance entrance for assistance/provision of a surgical style mask. Surgical style masks will be provided to employees at the Smilow entrance; temperature scanning will continue to occur upon entry to Smilow due to the variety of individuals and healthcare workers entering that facility.

- Johnson Pavilion entry is open and staffed 24/7; BRB lobby and Stellar Chance lobby will be open and staffed from 7am to 7pm. Smilow lobby is open from 5am to 5pm; after hour access is provided via the HUP lobby.

- Digital signage will show best practice/behavior messaging.

- We are reviewing the installation of plexiglass shields at BRB, Stellar Chance, CRB, and Smilow guard stations (Johnson Pavilion already has a cubicle).

PEDESTRIAN FLOW AND SECURITY

Elevator and Stairwell Use

Wherever possible, we will encourage use of elevators to travel up and use of stairwells to travel down. This will help to limit cross contact with others and help maintain physical distancing.

For areas where walking up one flight of stairs would be more efficient (or safer because you are not waiting in the elevator vestibule), proceed as long as you can remain physically separated. This will likely apply to Stemmler ground to Stemmler 1st floor; CRB ground to CRB 2nd floor; BRB ground to BRB 2nd floor. For Smilow entrance, use escalator to travel up from ground to lobby and stairs to travel down from lobby to ground.

Stanchions

Wherever possible, stanchions will be placed to help with pedestrian traffic and flow.

Floor signs

Please be mindful of signs on the floors directing traffic flow and physical separation.

SIGNAGE AND COMMUNICATION

You will find new signs and flyers throughout campus, in conference rooms, and restrooms to promote social distancing, proper hygiene, resources, etc. Below is a sampling of what you will see on bulletin boards and on digital signage, and if any of the messaging would be helpful for your lab, program, or department, you can access any file with a request to the EVD/CSO.

ELEVATOR USE

Use of elevators should be limited based on size to maintain social distance between individuals. In general, there should be a 1 to 4 person limit on elevators; when an elevator is carrying 4 people, please stand at the corners of the elevator car. Please face in one direction. Where possible, we encourage use of stairs.

If you are using the elevator, wear your mask or face covering, and avoid pushing the elevator buttons with your exposed hand/fingers; consider using the cap of a pen, your knuckle, or your elbow to push the elevator button.

Wash your hands thoroughly or use hand sanitizer with at least 60% alcohol upon departing the elevator.

RESTROOM USE

Use of restrooms should be limited based on size to maintain at least 6 feet distance between individuals. Whenever possible, we ask for no more than one person at a time in the restroom. Determine if it is occupied by opening the door slightly and asking before you enter. The general guidelines for keeping yourself and others safe in any environment are no different from what should be practiced in the restrooms, which include:

- Practice social distancing and wear a mask
- Avoid touching your face and do not spit
- Avoid loitering in common areas and setting down personal items
- Wash hands with warm water and soap for at least 20 seconds
- Dry hands thoroughly
- Use a paper towel to turn off the sink and open the door to exit

GENERAL FACILITY OPERATIONS AND HOUSEKEEPING GUIDELINES

Unless otherwise noted, all standard procedures and protocols remain in place with respect to both housekeeping and operations work:

1. Housekeeping Operations

    a. High touch points are being cleaned frequently in common areas including bathrooms, kitchens, break areas, conference rooms and elevators. High touch points include door handles, light switches, hand rails, elevator panels, paper product dispensers, sink faucets and restroom fixtures.
    b. Bathrooms are being disinfected daily with high touch point cleaning happening multiple times per day.
    c. Bathrooms, kitchens, and breakrooms are being monitored for soap and paper towel levels and restocked as necessary. Bathroom paper towel dispensers have been converted to touchless throughout all buildings.
    d. General trash procedures in main campus buildings have been altered due to Housekeeping staffing levels and trash is only being pulled from common areas and central trash depository in each floor. Programs are responsible for collection and depositing regular trash and recycling at a centralized location on each floor. Refer to specific signage in each building for further instructions. Trash collection procedures in SCTR/SPE/JMEC remain the same.
    e. Soap and paper towels at lab sinks remain the responsibility of the individual department / program.
    f. Alert Space Planning and Operations (SPO) Operations & Engineering at planops@pennmedicine.upenn.edu or 215-898-8760 of any issues, questions or concerns.

2. Hand Sanitizer

    a. Hand sanitizer stations have been placed at the main entrances throughout PSOM buildings, including "race track" locations on main campus. Alert SPO Operations & Engineering at planops@pennmedicine.upenn.edu or 215-898-8760 of any issues, questions or concerns, including empty sanitizer dispensers.
    b. Hand sanitizer on upper floors of all buildings will be the responsibility of individual departments. Recommendation for placement would be elevator lobby, break area or main lab entrances, if distributed. Reminder that handwashing remains the primary recommendation by both CDC and EHRS when available.

3. Common Areas

    a. Conference Rooms and Break Rooms
        ▪ Signage will be posted at all common conference rooms with maximum occupancy allowed per social distancing guidelines and suggested seating arrangements.
        ▪ Departmental conference rooms will be the responsibility of the department to ensure proper social distancing is maintained. SPO can be contacted for assistance in determining occupancy or furniture arranging, if needed, at planops@pennmedicine.upenn.edu or 215-898-8760
    b. Kitchens
        ▪ Signage will be posted with best practices and recommendations in all common kitchen areas.
        ▪ Shared appliances are not included with Housekeeping services and are the responsibility of the departments / programs.
        ▪ Kitchens that are combined with break areas will be included in the maximum occupancy total for the break room.

BREAKROOMS, MEETING SPACES, AND CLASSROOM GUIDELINES

At all times, physical distancing must be maintained in breakrooms, meeting spaces, and classrooms, and we ask all personnel to adhere to the following guidelines:

- Stagger break times and limit the number of people in breakrooms to allow for 6 feet of physical distancing
- Arrange seating to be forward facing instead of employees facing each other
- Remove chairs to limit seating capacity
- Avoid use of shared appliances (toasters, coffee makers, microwaves), if possible


Image: https://www.123rf.com/

Meals: Before and after eating, you should wash your hands thoroughly. If eating in breakrooms, you should only remain in the room for eating purposes, avoiding unnecessary touching of your face, and not staying in the breakroom for longer than you need to dine. Those using shared tables for eating should not put their food directly on the table, but rather use a napkin and then discard the napkin when done.

Departments should remove or rearrange chairs and tables or add visual cue marks in shared break rooms to support physical distancing practices.

Disinfect all surfaces, including table, counters, handles, etc. after use in common areas.

Whenever possible, we strongly encourage you to take breaks and eat outdoors, which helps to reduce the potential transmission of the virus.
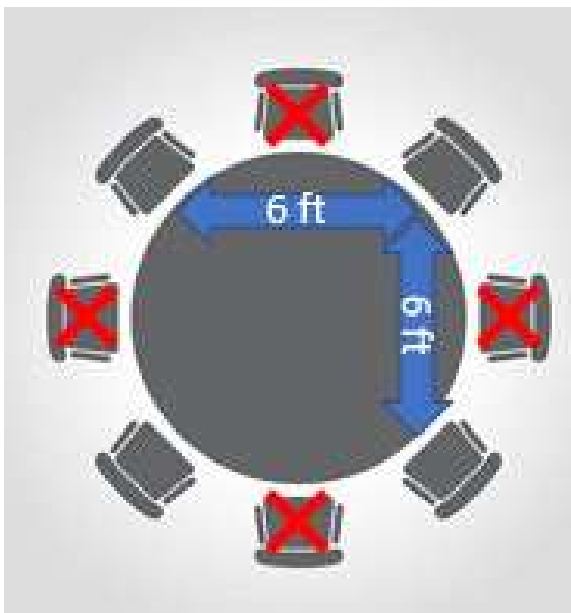
Physical distancing during meetings should include:

- Encourage virtual meetings and phone calls instead of in-person meetings
- Limit the number of people in conference rooms and common areas to allow for 6 feet of physical distancing
- If in-person meetings are required, limit attendance to less than 10 people and maintain 6 feet of physical distancing
- Encourage outdoor meetings wherever possible

[Source: EHRS Resumption of Research Training]

MEETING SPACES AND CLASSROOM GUIDELINES

In order to prepare for the phased-in, modified reopening of PSOM, Scheduling & Event Services (SES) will adhere to modified new space seating capacities following social distancing guidelines of 6 feet, in addition to adjusting reservations to accommodate circulation and housekeeping time allowances. SES is working with the Education Committee to determine best practice for Academic Classes as well as Research Seminar Series, Grand Rounds, Conferences, Administrative Meetings, and all other previously confirmed Fall 2020 events.

Planned Approach:	Based upon PA Governor's Red Phase. Updates to follow as restrictions ease.
Seating Capacity	New space seating capacities have been created allowing for 20-25% of previous default seating. SES will alter previously scheduled reservations to adhere to new capacities. Many conference rooms will now only seat 4-6 participants.
Signage	Placards will be placed inside/outside all space with new seating capacities.
Academic Classes	No in-person summer session I/II. Fall 2020 to be determined.
Events	No in-person seminar series, grand rounds, administrative meetings and conferences permitted. Limited Phase I research program events with permissions.
Room Layouts	Spaces will be altered to new capacities by removing/stacking excess furniture and by taping off seating in auditorium/lecture halls to allow for circulation and social distancing. Where possible furniture will be reset to classroom style layout, with only (1) seat per 60" table, instead of boardroom style to alleviate direct contact.
Housekeeping Time Allowance	Events will require additional time for space cleaning. Throughout the red phase, SES will build-in additional time to future reservations. This time will also allow for participants to vacate the space before the next group arrives. No back-to-back events will be permitted.
Food & Beverages	Personal food items for the returning research labs will be permitted. Lab members must follow social distancing criteria.
Social Behavior	Limited Phase I research program event participants will follow University mandatory guidelines; wearing masks and frequent hand-washing.
Virtual Events	Events may be scheduled to allow for virtual streaming or recording of faculty/speakers with a limited number of participants in scheduled space as long as Media Technology and Production is available to provide support.
External Events	Not permitted at this time.

RESUMPTION OF WORK IN THE OFFICE AND RESEARCH IN DRY BENCH LABORATORIES

At all times, physical distancing must be maintained in office spaces, and we ask all personnel to adhere to the following guidelines:

- Review desk assignments and ensure adequate separation between workstations, with at least 6 feet between occupants

- In general, time in the space should be dedicated to experimental and/or computational work and data analysis that cannot be conducted or completed remotely

- Use virtual meetings and phone calls rather than in-person meetings

- Continue remote work arrangements whenever possible to limit the number of people in shared office spaces

- For shared work spaces, a sign-up sheet must be placed on the door to ensure no more than one person is in the room at a time. The sign-up sheet should also be electronic so people are aware of use before arriving at the room

- Avoid sharing writing instruments, phones, desks, keyboards, tools, and equipment

- If sharing of equipment cannot be avoided, it must be cleaned and disinfected before and after use

- Office doors should remain closed, with only one person in an office

- For shared workstations, only one researcher should work at a given workstation at a time, with disinfection of equipment and surfaces between users

- Set up an online shared calendar to track personnel flow
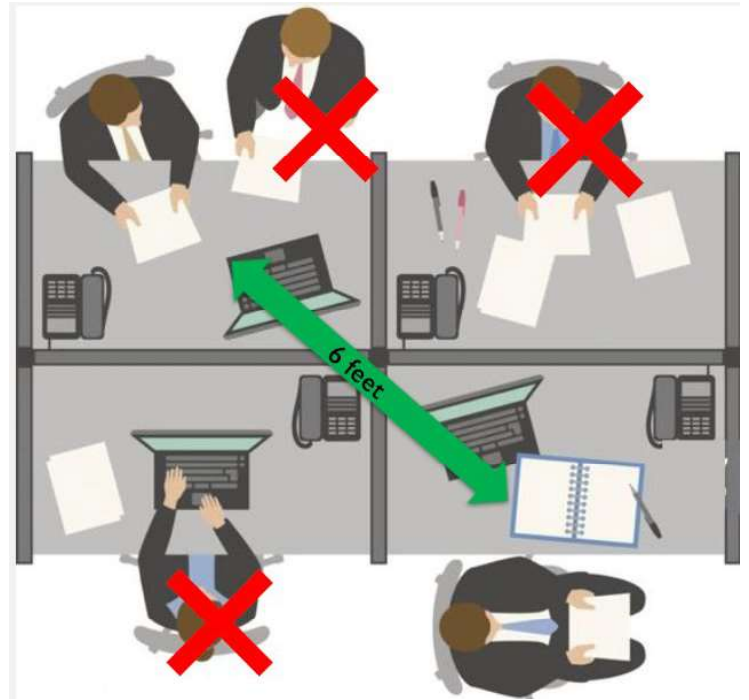
[Source: EHRS Resumption of Research Training]
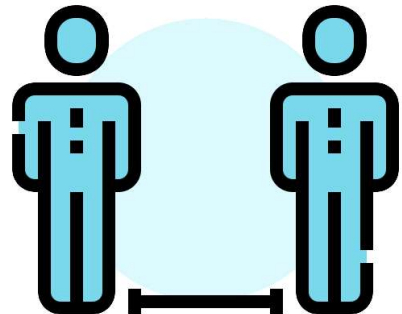
RESUMPTION OF WORK IN WET BENCH LABORATORIES

Masks must be used in the wet bench laboratories. For your safety, use these precautions:

- Avoid contaminating your mask. Touch it only with un-gloved, washed hands
- Keep a spare mask available in case yours becomes contaminated, or know where to obtain a spare mask
- Store your mask properly
    - Carefully fold so that the outer surface is held inward and against itself to reduce contact with the outer surface during storage
    - The folded mask can be stored between uses in a clean, sealable paper bag. Do not use plastic
- Discard and replace contaminated surgical masks
- Use best lab hygiene practices to avoid splashes, contaminated surfaces, and release of chemical vapors into the lab
- Use eye protection

Regarding glove use:
- Use gloves to protect you from hazards in the laboratory according to your normal lab procedures and practices
- Do not wear gloves outside of the laboratory, in common areas of the building, or in shared facilities unless gloves are required by the facility's policies
- Focus on frequent hand washing, not touching your face, and disinfecting shared items and high-touch areas regularly
- Choose the correct glove size
- Check for holes or defects
- Avoid touching face or phone while wearing gloves

- Stay at least 6 feet from other people at all times
- Each lab should determine how physical distancing will be maintained within their unique laboratory layout
- At minimum, no more than one person per bay with appropriate social distancing. If the wet lab configuration is not a typical bay, maintain at least 6 feet separation
- If lab members do not have work that requires them to be in the lab, they should not come to the lab (unless they are needed as a safety buddy to prevent someone else from working alone)

[Source: EHRS Resumption of Research Training]

RESUMPTION OF WORK IN WET BENCH LABORATORIES
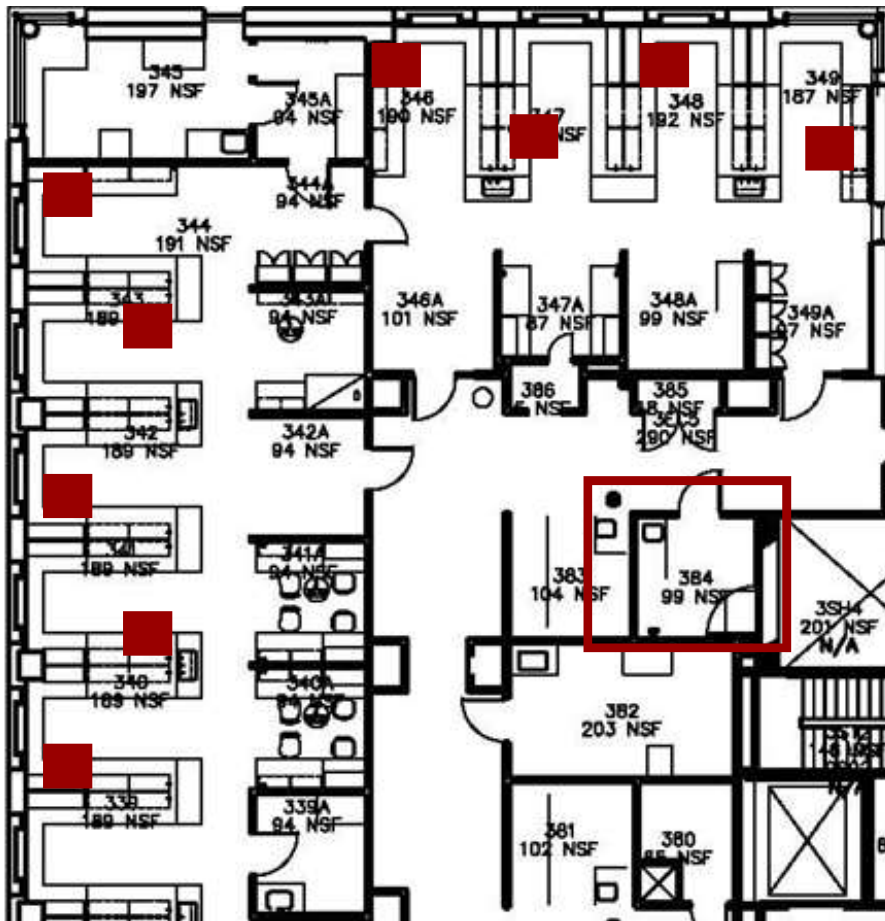
As we return to the laboratories, we emphasize again the need to maintain at least 6 feet distance. This will mean no more than one person per lab bay as depicted in the diagram to the left. In Phase 1, 20% density will be strictly enforced.

Maintain strict social distancing.

For shared procedure spaces, a sign-up sheet must be placed on the door to ensure no more than one person is in the room at a time. The sign-up sheet should also be electronic so people are aware of use before arriving at the room.

Absolutely no eating or drinking in the lab at any time.

At all times regardless of the scaled density requirements, anyone in the wet bench laboratories must wear:

- Masks (see page 17 for more guidance)
- Safety goggles or glasses, when applicable, must meet ANSI Z87.1 standard. Safety glasses are available from Thermo-Fisher
- Gloves, which must be removed and properly disposed whenever leaving the lab. At least a dozen pairs per person per day should be available
- Lab coats should be made of 100% cotton except for the elastic cuff. Lab coats should be laundered as needed. Each lab worker should have a spare coat to wear while their primary coat is being laundered. Any Penn-approved vendor may be used for lab coat cleaning. Lab coats are available from Thermo-Fisher. Disposable lab coats should not be worn in the lab
- With regards to personal attire: legs must be covered by long pants or a long skirt and closed-toe shoes are required. Shorts and sandals may not be worn into the lab even under a lab coat

In addition:

- BSL 3 labs should provide N95 masks but are not required of all labs
- Face shields (optional or as needed)
    - Should be used in tandem with a mask
    - Cannot be used in order to increase lab occupancy or reduce social distancing requirement

[Source: EHRS Resumption of Research Training]

RESUMPTION OF WORK IN WET BENCH LABORATORIES

Proper lab protocol remains strictly enforced, and you will find lab safety guidelines from EHRS here.

Once experiments and work are completed within the wet lab space, non-wet bench activities, such as analyzing data, reviewing papers, reading and writing, or discussions with lab members should be conducted remotely.

We encourage a common calendar for every laboratory and every floor so that we can document all who enter and exit our facilities. This is especially important for contact tracing purposes.

Furthermore, we encourage all labs managers and those overseeing a building floor to create a social distancing floor plan which should be shared with every program on the respective floor, and we ask for continual monitoring of appropriate flow and density.

An example of such an outline is below.

Social distancing map for wet bench laboratory work, courtesy of the Department of Medicine. Colors depict individual labs / programs.
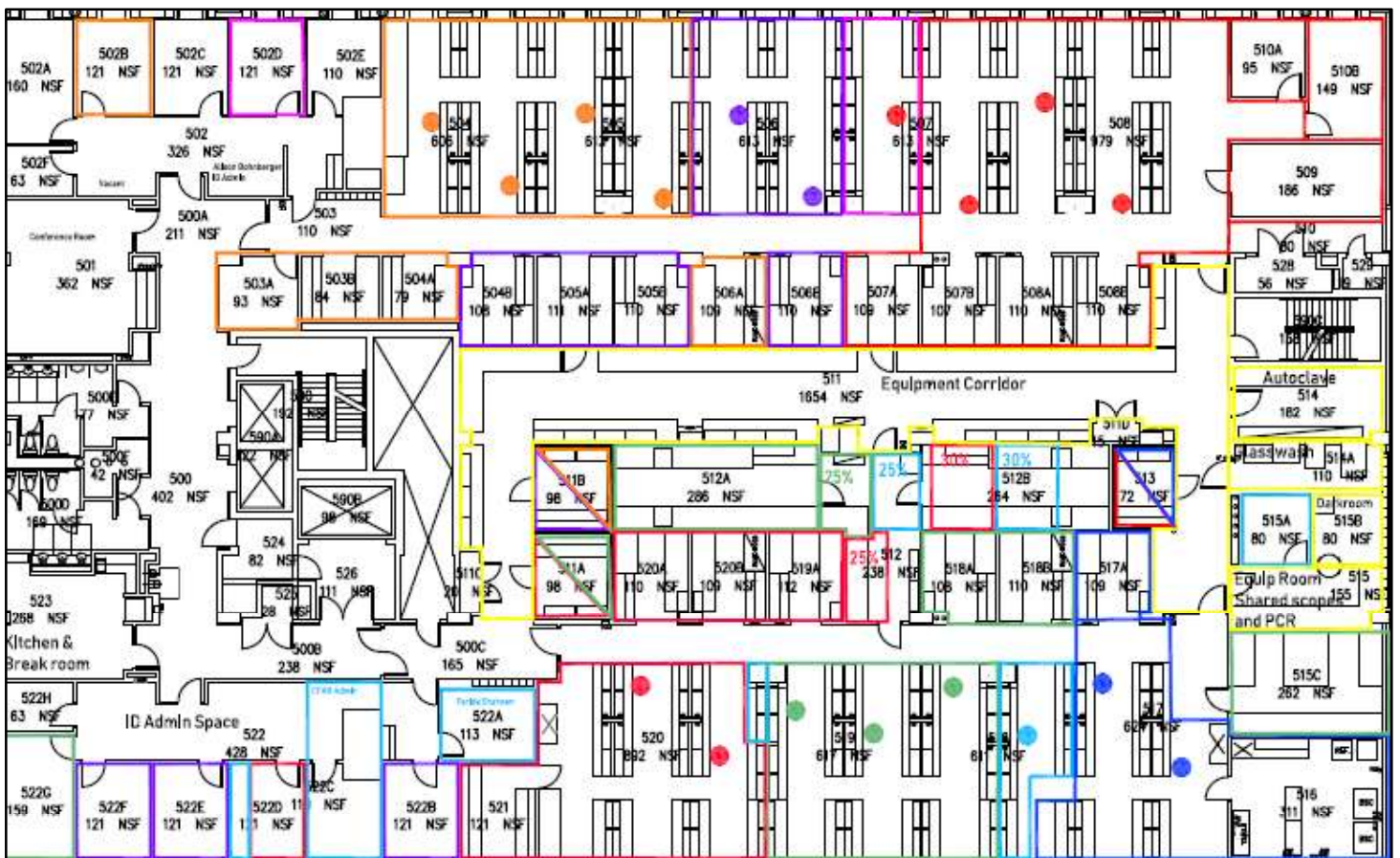
EHRS RESEARCH RESUMPTION CHECKLIST

As advised by EHRS, prior to ramp-up of research operations, once you are approved by Penn to resume research, it is advisable to conduct a pre-check of the laboratory condition and supplies before starting lab work. The following should be assessed as part of this check:

- ❑ Confirm fume hoods, biosafety cabinets, and other key safety equipment are operating normally, have current certification (if applicable), and alarms are not activated.
- ❑ Check status of equipment needed to support your research such as ice makers, cold rooms, refrigerators/freezers, sinks, and autoclaves. Submit service requests or notify your building administrator if repairs are needed.
- ❑ Confirm you are using correct start-up procedures for critical pieces of equipment. If you are unsure, check manufacturers' web site.
- ❑ Confirm adequate waste-collection supplies are available for near-term research needs. This also includes bleach and ethanol supplies for inactivating biological waste prior to disposal.
- ❑ Confirm adequate personal protective equipment is available for near-term research needs.
- ❑ Confirm there is an adequate supply of soap and paper towels for hand washing and that disinfectant will be available for cleaning shared equipment and work areas.
- ❑ Ensure that your radioactive material package arrives on time and is checked in properly. If your order does not arrive the day after it is placed, please contact the vendor for shipment information. If you need assistance, please contact EHRS 215-898-7187.
- ❑ Ensure safety showers are not obstructed, and eyewashes are functioning properly. Flush all eyewashes until the water runs clear.
- ❑ Check for leaks or unusual physical conditions in the lab that need to be addressed.
- ❑ Check expiration dates and integrity of chemical containers. Contact EHRS to request pick-up of expired chemicals or damaged containers.
- ❑ Assess what support services and deliveries (such as compressed gases, reagents, dry ice) you may require when your research is restarted and determine whether those services are operational and will be available when you need them.
- ❑ Anticipate delays in response and repairs and the possibility of limited personal protective equipment and other consumable supplies.
- ❑ Investigate how other facilities such as cores, sample/specimen providers, and collaborators will be managing their services and maintaining physical distancing requirements so you can prepare for any access requirements or delays.
- ❑ Anticipate delays in reaching your lab in high-rise buildings. Physical distancing must be maintained in elevators.

Check administrative/compliance requirements

- ❑ Confirm that all lab members have current safety training and have completed the Resumption of Research Training for Lab Personnel.
- ❑ Check status of compliance documents in BioRAFT including Biological Registration, Lab Hazards, Chemical Hygiene Work Plan & Safety Assurance Statement, and Exposure Control Plan.

RESUMPTION OF RESEARCH IN CORE AND OTHER MULTI USER FACILITIES

Resuming research in the many core facilities around campus presents challenges over and above resumption of research in individual PI laboratories. Examples include (i) significant numbers of distinct individuals and/or samples/material interacting with the core facility staff and equipment (as opposed to the relatively closed community within a single PI laboratory); (ii) the small spaces allocated within some core facilities; (iii) the requirements for training of users within some facilities that challenge standard approaches to social distancing; and (iv) the fact that core facilities can often serve users from beyond Penn – ranging from external users in the Philadelphia region to users around the nation and world.

Formulation of facility resumption plans: Core facilities contemplating the resumption of research in Phase I must develop a *facility resumption plan*, which addresses essential operational issues. For the purposes of formulating these plans, it is useful to largely divide core facilities into two groups (acknowledging that many facilities operate in a hybrid model under normal circumstances): facilities where the research is primarily performed by staff (a 'staff facility'); and facilities where the research is primarily performed by users, potentially with the training and assistance of the staff (a 'user facility').

Regardless of whether a core facility is primarily a staff or a user facility, all core facilities should address at least the following issues:

What activities need to be completed *in advance* of safely and effectively resuming work, and what is the timeline for these activities? Although the diverse nature of our core facilities precludes an exhaustive list, examples include understanding timelines for re-ordering animals, supplies, replenishing stocks of PPE that may have been donated previously for medical purposes and may have extended timelines, and updating of policies and procedures to contemplate social distancing and inter-user disinfection protocols.

How will social distancing requirements affect staffing and operations? What specific steps will your facility take to comply with these requirements? Will your facility benefit from staggering of shifts or personnel? Will your facility benefit from rearrangement of furniture, equipment, or workflow to enhance social distancing? How will you maintain staff safety monitoring (e.g., a 'buddy system') under social distancing requirements?

What changes to your current policies and procedures will be necessary to safely re-open your facility? Examples might include a disinfection protocol between shifts or maintaining hygiene associated with sample boxes that pass into or out of your facility.

Will you restrict the total number of users within your facility at any time? If so, what are your plans for scheduling and prioritization? Many users of core facilities are individual members of the same research group. Is it desirable to reduce user count during the yellow period by having each group nominate a subset of users authorized for your facility? (There may be negative pedagogical implications both for those nominated and those not nominated).

RESUMPTION OF RESEARCH IN CORE AND OTHER MULTI USER FACILITIES

Have you developed a communications plan to transmit new policies and procedures to your user base? How will you enforce your new policies and procedures? What are the 'penalties' to users for non-compliance, and how will they be communicated?

If permitted and/or required by federal, state, and local law, and Penn policies and guidelines, will your user facility require any special procedure before allowing non-Penn personnel to enter the user facility (e.g., temperature check with temperature less than X° required to be admitted?) If so, how will this be implemented?

Additional challenges for user facilities: In addition to addressing the questions above, user facilities should address additional issues in their resumption plan including:

During the Phase I, does it make sense to consider transforming your user facility into a staff facility, rather than allowing users to enter and utilize core resources? Workflow, capacity, and pedagogical issues should be considered. This approach may be possible with some facilities and not possible with other facilities; issues specific to your facility should be discussed in your resumption plan.

If your facility remains a user facility during Phase I and II, core facilities should only be accessed by Penn users, unless approved by the departmental chair of the core facility and Lou Soslowsky, Associate Dean of Research Integration. Outside users will be allowed to access core facilities when capacity is available after Penn backlog is addressed.

Are there particular areas within your user facility which are at most danger for contamination, and if so, what procedures will be taken to minimize risk? Examples might include gowning areas, repositories for safety glasses, computer keyboards, microscopes, and overall traffic flow through the facility.

Will you restrict the total number of users within your facility at any time? If so, what are your plans for scheduling and prioritization? Many users of user facilities are individual members of the same research group. Is it desirable to reduce user count during the yellow period by having each group nominate a subset of users authorized for your facility? (There may be negative pedagogical implications both for those nominated and those not nominated).

Have you developed a communications plan to transmit new policies and procedures to your user base? How will you enforce your new policies and procedures? What are the 'penalties' to users for non-compliance, and how will they be communicated?

Approval and oversight of core facility plans: Cores should develop research ramp-up plans, confirming certain details such as logistics regarding social distancing; provision of PPE for all working on-site; provision of service to Penn researchers only during Phase I. It is integral that core facilities are aligned with and incorporated in Department/Center/Institute plans, and have obtained approval from respective leadership. Chairs and center/institute directors need to be the local control as there are many specific issues with each core that should be addressed locally.

PHASED RETURN FOR PENN MEDICINE CLINICAL RESEARCH

This document describes PSOM's phased scaling back up for clinical research. It assumes that all faculty and staff will adhere to all Penn Medicine, University, City and State 'Shelter at Home' directives and 'return to work' requirements as they are released, inclusive of testing, use of PPE, temperature checks, and provision of strategies, such as shift work, to ensure continued social distancing practices within the workplace. These requirements will be described in detail in a separate document that will be released by the University and PSOM. It can be expected that this document may change over time, as requirements change. We will communicate these changes to you as they occur.

As PSOM actively plans for a scaling back up we encourage Clinical Research PIs to actively anticipate, discuss and address their staff's concerns and anxieties about returning to work, transportation challenges and child/eldercare responsibilities and proactively plan for how they will be responsive to them within their respective research teams, Divisions and Departments. The timing of the first phase will be determined by the University in partnership with PSOM. At this time we do not anticipate the first phase occurring prior to June 4th, 2020. The duration of time between each phase is not known at this time and it will be determined by the University in partnership with PSOM and will be driven by State and City directives.

Return to full clinical research activity will occur in a phased manner that necessitates a categorization and continued prioritization of PSOM's clinical research portfolio. This document describes the categories of clinical research that may resume during each phase of scaling back up. Departments are asked to work with their Clinical Research Faculty to prepare for the phased return by reviewing their current Clinical Research portfolio and generating a summary of which projects fall into which phase of the return using the categories described below. Please email summaries of Non Oncology Clinical Research to Emma Meagher, MD and Oncology summaries to Bob Vonderheide.

Existing prioritization committee structures will remain in place throughout the phased process. It is anticipated that review by the committee will only be required when there is uncertainty in the characterization of a project or when there is a desire by the department or a faculty member to begin a project that has been categorized into a later phase of the return plan. An escalation process will be available in situations where consensus has not been reached or approval to proceed has not been granted and the faculty member or department chair wishes to appeal the decision (fig 1 on page 38).

Four categories are outlined below.

Category A: Research activity that can continue as of May 8, 2020. Please note that during this period the University's 'Shelter at Home' requirements remain in place.

1. Essential Clinical Trials include the following
   a. New and existing clinical trials that hold the clear prospect of benefit for patients with life threatening or serious conditions.
   b. In-person study visits required to assess safety of patients who were enrolled in clinical trials prior to the pandemic.

c. New and existing clinical trials where enrollment into the trial is the only available option for the patient.

2. COVID Clinical Research

3. As clinical services lines begin the "resurgence" to clinical practice, new and existing clinical trials and non-interventional clinical research where the research activities that must occur on site can occur during inpatient stays and <u>during</u> patients' already scheduled clinical visits <u>and those same research activities can be executed without requiring that clinical research support staff return to campus and the PI has confirmed that imaging, IDS, CHPS, CVPF and all other research specific services are available to execute the trial.</u>

4. All research activities that can be conducted remotely should continue to be conducted remotely with all staff working remotely. This includes:
   a. Trials where in person visits can be eliminated or conducted remotely via telemedicine and investigational meds can be delivered to the participants' home.
   b. Non interventional research where research participants do not need to come on campus, research staff can effectively execute the research activities remotely and direct contact with participants is not required.

Caveats: *PIs and CRCs conducting 'Essential Clinical Trials' and 'COVID Research' work (# 1 and 2 above) are considered essential employees and are required to work on-site and adhere to all requirements to reduce likelihood of infection of staff and research participants. Research staff involved in # 3 above, and monitoring, auditing, training, SIVs, research systems support, financial management, contracting, and regulatory support activities* <u>*are not permitted to return to campus at this time*</u>*. Clinical research participants are not permitted on campus unless they are a participant in an approved essential trial, a COVID research study or they are on campus for clinical care reasons as in-patients or outpatients.*

Category B. Describes additional clinical research that will be permitted to recommence and associated staff will that be permitted to return on-site during the **<u>first</u>** phase of re-entry. We do not anticipate this happening prior to June 4th, 2020.

1. Investigator initiated existing and new FIH clinical trials of Penn developed products.
2. Existing investigator-initiated NIH or other 'not for profit' funded research that do not meet the criteria defined in category A.
3. Existing investigator-initiated industry-funded research that do not meet the criteria defined in category A.
4. All research activities that can be conducted remotely should continue to be conducted remotely with all staff working remotely. This includes:
   a. Trials where in-person visits can be eliminated or conducted remotely via telemedicine and investigational meds can be delivered to the participant's home.

b. Non-interventional research where research participants do not need to come on campus, research staff can effectively execute the research activities remotely and direct contact with participants is not required.

Caveats: Clinical research staff involved in direct contact with research participants enrolled in the research described in 1-3 above will be required to be on site (PIs and CRCs). Research staff involved in #4 above and in training, SIVs, research systems support, financial management, contracting, and regulatory support will continue to work remotely. Penn monitors and auditors would be permitted on site only to review documentation that is not accessible remotely. Industry and CRO monitors will be permitted on site if they meet all standards required for Penn employees.

Category C. Describes additional clinical research that will be permitted to recommence and associated staff will that be permitted to return on-site during the **second** phase of re-entry. We do not know when phase 2 will begin.

1. New investigator-initiated NIH or other 'not for profit' funded research.
2. New investigator-initiated industry-funded trials.
3. New and existing industry-sponsored clinical trials.
4. All research activities that can be conducted remotely should continue to be conducted remotely during the second phase of re-entry. This includes:
    a. Trials where in person visits can be eliminated or conducted remotely via telemedicine and investigational meds can delivered to the participant's home.
    b. Non interventional research where research participants do not need to come on campus, research staff can effectively execute the research activities remotely and direct contact with participants is not required.

Caveats: Staff involved in direct patient contact would be required to be on site (PIs and CRCs). Research staff involved in #4 and in the following activities would continue to work remotely: training, SIVs, research systems support, financial management, contracting, and regulatory support. Penn monitors and auditors would be permitted on site to review documentation that is not accessible remotely. Industry and CRO on-site monitoring, auditing and SIVs will be permitted on- site if they meet all standards required for Penn employees.

Category D. Describes additional clinical research that will be permitted to recommence during the **third** phase of re-entry.

1. Everything else that has been conducted remotely during the pandemic and there is a wish to return to campus
    a. Chart reviews
    b. Data collection
    c. Observational studies
    d. Journal clubs/ lab meetings
    e. In-person/on-site trainings

PHASED RETURN FOR PENN MEDICINE CLINICAL RESEARCH

Caveats: At this stage, all clinical research support staff required for optimal execution of clinical trial work would be required to be on-site. A new normal of staff working full- or part-time remotely would be considered appropriate for PIs, CRCs, and staff who support the execution of research with no required in-person patient, staff, or system interactions.

Fig 1: Prioritization and Escalation process
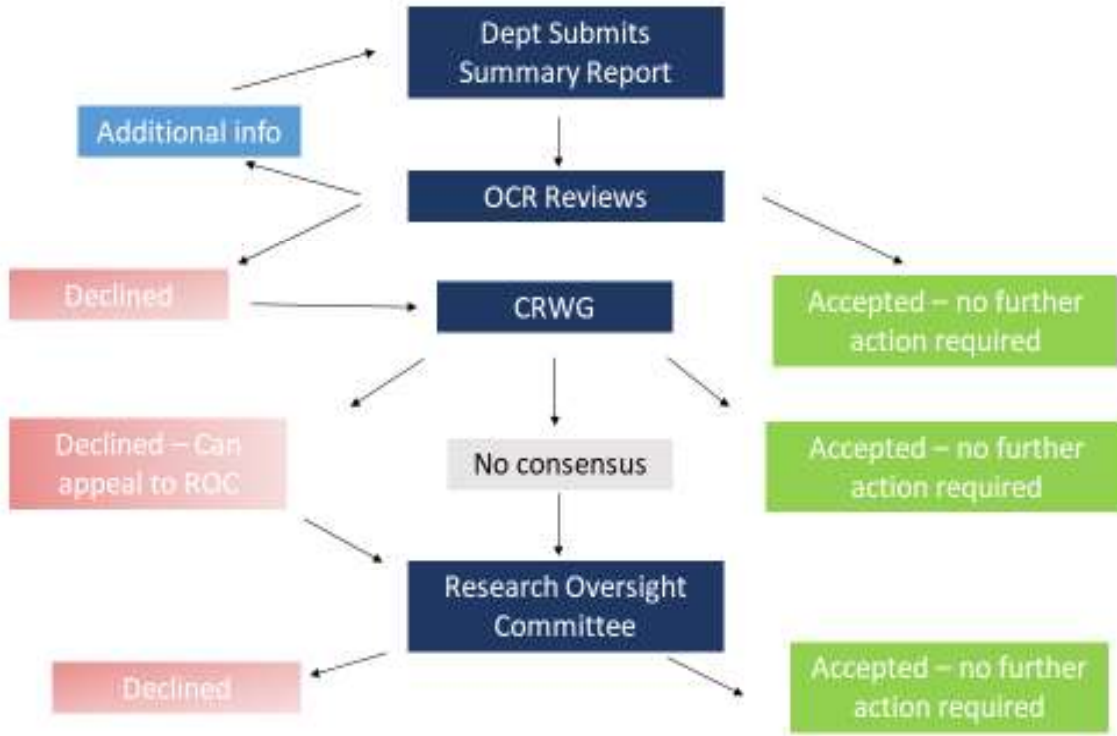
RESUMPTION OF ANIMAL RESEARCH

Social-distancing plans for animal work being brought back to the lab:

- PIs will be required to develop their own social-distancing plan for their lab.
- These distancing plans need to be coordinated with other laboratories on the same floor, suite, or other defined "functional unit" of laboratory. This should include coordination with University Laboratory Animal Resources (ULAR) to enter a vivarium to pick up animal(s) from a housing room.
- Individual lab plans and "functional-unit" plans need to be approved through the Research Resumption process in the school.
- Working groups should be developed to facilitate communication among the labs.
- Only work that needs to be done in wet space should be conducted; all work that can be done remotely should still be done remotely.

Use of shared ULAR vivarium space needs to be coordinated with laboratory staff and ULAR.

- ULAR currently posts [electronically and/or on vivarium rooms] scheduled ACT (animal care technician) work [cage changes etc.]. During these times, the housing room should not be entered while ACTs are working in the room.
- An electronic calendar is being developed so that laboratory staff can access shared space safely with other labs, ULAR ACTs, veterinarians, and vet techs.

As described elsewhere in more detail, PIs will be responsible for developing work-shift rotations that should follow University/School guidelines with the understanding that different research programs may need different rotation schedules.

PIs should be sensitive to student and staff issues that surround personal life [e.g., child and family care, use of mass transportation, etc.] during the COVID-19 pandemic. Please consult your Human Resources professional contact for additional information and help.

The expectation is that researchers will disinfect areas before they start work and when they are done working. This includes disinfecting door handles as they exit a room.

Please continue to look for communications from ULAR for updated information and processes.

WORKING FROM HOME

To the extent possible, we ask that for all staff, students, trainees, and faculty, work that can be successfully done remotely continue to be done remotely. To support such efforts, the PSOM Office of Organizational Effectiveness has developed the following positive work-from-home tips:

1. Get into a routine
We're creatures of habit and our brains like routine. Set your alarm for the same time every day, eat breakfast, and get ready for the day - even if it's just to wander a few feet to your workspace.

2. Get changed every morning
As tempting as it is, it creates a psychological block to stay in your PJs. And past 10am can feel a bit depressing.

3. Stay in touch
Communication and community are key. Especially if you live alone. Don't be shy about telling your manager what you need. Try scheduling virtual lunches, or 20 minutes to enjoy a coffee and just chat.

4. Treat yourself kindly
Your health mentally and physically should be paramount. Although you might not be able to get out and about, it's still important to keep active and healthy. Try exercising, meditating, cooking fresh food.

5. Get comfortable
Create a designated "workspace" or office within your home (and make it a space where you like spending time!). Find a place that is comfortable and can be mostly dedicated to work. This will allow for less distractions from home/life and will allow you to turn off work and focus or be present in life when you're not working.

6. Be mindful of your social media consumption
Reduce the amount of social media and news you consume at home. Try to check the news once a day. And only to trusted news sources. It's easy to get sucked down rabbit hole, which can make you feel wretched and stressed.

7. Use one screen at a time
Multi-tasking is no easy feat. Be wary of having more than one screen on the go. It's best to limit your exposure to screens. Especially important when the day has no definitive start and end.

8. Get outside (if you can)
Try to have a view outdoors or walk by a view every 40 min even if it means staying inside. It's good to get out and get some exercise if you can, but obviously only if it's socially responsible to do so.

9. Set your working hours (start and end time)
This will allow others to count on you during that time AND for you to turn off work without the guilt that it is 'always there'.

10. Get to know your co-workers
Tour your house/apartment. Have a meet and greet of the family/kids/pets/roommates. Treat it as an opportunity to get to know your team better and bond over your shared love of dogs/cats/miniature poodles.

11. Break up the day
Take clear breaks. Use your breaks to get away from your desk or workstation. And don't work right through from dawn to dusk. You may feel like you're on a roll, but you'll soon burn out without regular breaks.

12. Block off time to work
If you don't, your day could easily be filled with endless video conferencing calls.

13. Make the most of the tools available
Use your calendar to schedule what you'll do and when you'll do it over the course of your day.

14. Set boundaries
This will stop work creeping into your home life. Pick a definitive finishing time each day and make sure the people you work with regularly are aware of it. If you want to have a (socially responsible) walk once a day at noon, then pop it in your calendar so people know. Or communicate when you'll be available and when you won't be.

15. Recognize we're living (and working) in unusual times
You may get anxious and stressed at times, and that's okay. It's normal. The most important thing is to communicate as much as possible about how you're feeling and ask your team to do the same.

Leading Remote Workers @ PSOM

Furthermore, the PSOM Office of Organizational Effectiveness has developed a series of tools to assist in and promote remote work, including a webinar to increase your ability to identify:
- Challenges of managing offsite employees and how to mitigate those challenges
- Effective management of expectations and productivity in a remote work environment
- Best practices for the successful management of offsite employees

More information at https://www.med.upenn.edu/oe/managing-remote-workers-psom.html

RESOURCES FOR ACCESS TECHNOLOGY

Offices across the School and University continue to work hard to ensure research efforts proceed without disruption, operating as they do every day to support our community. This includes the infrastructure and technology necessary to support remote working, teaching, learning, and conferencing, including:

Video Conferencing:

Penn subscribes to BlueJeans, which is a cloud-based cross platform video conferencing service. You can access via this link with your PennKey username and password. For detailed instructions, please see here. If you would like your video conference supported, moderated, and/or recorded (non-HIPAA and Non-Intellectual Property information for upload), or if you have any questions, please contact the Media Technology & Production (MTP) Services.

Skype for Business is supported by Penn Information Systems & Computing (ISC). Please click here for more information.

Recording Talks or Lectures:

Limited access will be given to the Jordan Medical Education Center is equipped with a two-camera television studio and video production facility featuring virtual sets, live broadcast options and high quality audio/video services. The MTP team can pre-record courses, lectures, and seminar series and post to the Mediasite platform for video-on-demand.

In addition, please visit the Center for Teaching & Learning and the Online Learning Initiative, which provides resources and strategies to guide our faculty in remote teaching.

Please see here for a list of School of Medicine building locations and rooms where BlueJeans and Mediasite are supported.

Collaboration Tools:

If you have not already, begin saving shared files on Penn+Box, a cloud-based collaboration service for securely managing and sharing files and folders, both within the Penn community and externally. Consult your PMACS local service provider with questions.

Slack is used by many labs to keep conversations organized and accessible from anywhere, anytime. In addition, while not officially supported by the School, we are also aware of others utilizing the following platforms: Gotomeeting, Zoom, and Webex.

Lastly, the Office of the Vice Provost for Research is maintaining a suite of resources to support the Penn Community, which you can find here.

SUPPORT FOR MENTAL HEALTH AND WELLNESS OFFERINGS

COVID-19 is triggering complex emotions, anxiety and fear. The anxiety associated with this crisis is profound and based entirely in reality. The perceived "real root" of anxiety may differ for each of us, but the real root is ultimately the virus itself. We each contribute what we can. The PennMedicineTogether effort hopes to offer resources and strategies to help people cope, which we all do differently.

The Workforce Wellness Committee is committed to providing support for you and your family during this difficult time. Through still-developing and ongoing initiatives, carefully curated resources, and responsiveness to your feedback, we are here for you, and we are all in this together: *PennMedicineTogether*. The initiative is designed to:

- Recognize that COVID is triggering complex emotions with profound anxiety based entirely in reality. The specific experience may differ for each of us but the real root is ultimately the virus itself
- Emphasize that we each contribute what we can
- Offer resources and strategies to help people cope in a manner that suits each person individually
- The resources are particularly useful for those who want help managing the anxiety or depression

[Source: https://www.med.upenn.edu/PennMedicineTogether/]

COVID MENTAL HEALTH AND WELLNESS OFFERINGS

COBALT

PennCOBALT Digital Platform
penncobalt.com

- Web-based platform that provides curated mental health and wellness content, live groups, and individual virtual support
- Uses targeted assessments to streamline content and triage to the right level and type of support
- Embedded scheduling and telehealth capabilities to provide HIPAA-compliant mental healthcare at a safe distance

CONTENT

Coping Tools On Your Time

- Common Concerns: Links to curated material including articles and videos.
- Links to wellness resources.
- Available through PennCOBALT: On Your Time.

Coping with Covid Blog

- Ongoing blog site for asking questions and sharing concerns, tips and thoughts.

INDIVIDUAL SUPPORT

PennPEERs

- Virtual 1:1 time-limited peer connection and support. Peer supporters bear witness and normalize reactions to stressors
- Support can escalate to additional resources as necessary
- Best suited for those who have experienced a discrete stressor or are otherwise seeking support from a peer outside their typical network
- Scheduled through PennCOBALT: Connect with a PennPeer.

Resilience Coaches

- Virtual 1:1 sessions with individuals trained in evidence-based "psychological first aid"
- Individual, brief support and assistance (NOT to be confused with individual psychotherapy)
- Can connect individuals to a variety of resources and professional services as necessary
- Best suited for those seeking coping/resilience strategies on a brief, individual level
- Scheduled through PennCOBALT: Connect with a Resilence Coach.

Psychotherapy

Short-term, supportive psychotherapy through Employee Assistance Program (EAP)

- Individual short-term supportive, free psychotherapy resources for employees experiencing work/life, financial or psychological concerns for any reason but particularly related to COVID. Does NOT provide medication management
- Best suited for those experiencing acute issues with adjustment or transition, mild depression or anxiety, or work/life balance
- Scheduled through EAP
  - UPHS EAP access: Philadelphia Region and CCH: 888-321-4433; Princeton: 800-527-0035; LGH: 800-364-6352
  - University EAP access: Health Advocate: 866-799-2329

Ongoing Psychotherapy

- Evidence-based individual psychotherapy services by licensed clinicians
- Best suited for those with ongoing symptoms including anxiety, depression, trauma response
- Scheduled through PennCOBALT: Connect with a Therapist.

Psychiatry

- Assessment/diagnosis/treatment of mental health symptoms, staffed by telehealth psychiatrists
- Option for medication management for symptom treatment
- Best suited for those dealing with difficulties such as persistent insomnia, anxiety, depression and trouble functioning from stress related to COVID
- Scheduled through PennCOBALT: Connect with a Psychiatrist or Penn Psychiatry Clinic at 866-301-4724.

GROUP SUPPORT

General Audience

- Building Coping Skills: Interactive and pre-recorded virtual participation skill-based sessions designed to promote coping and resilience. Led by faculty from the Center for Treatment and Study of Anxiety.
- Sharing Our Covid Experience: Interactive, live virtual participation 30-minute group sessions moderated by faculty from Center for Treatment and Study of Anxiety and Department of Psychiatry.
- Guided Mindfulness: Virtual 45-minute scheduled meditation sessions. Led by Michael Baime, MD, Director of Penn Program for Mindfulness.
- Additional group resources available on Penn Medicine Together and PennCOBALT: In the Studio.

Specific Audience

- Team-based Resources by Request: Includes Facilitated Sharing Groups, Pastoral Care Groups. Available through PennCOBALT: In the Studio.
- Critical Incident Debriefings: Group support and resource-awareness sessions for those impacted by a critical incident. Usually one-time interventions, on-site or remote, provided via the Employee Assistance Program (EAP). Access via EAP: Philadelphia Region and CCH: 888-321-4433; Princeton: 800-527-0035; LGH: 800-364-6352.
- Topic-based Groups: Including FOCUS for Women, Recovery Friendly Workplace, Caregivers group, and more. Available through PennCOBALT: In the Studio.

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CONFIDENTIAL REPORTING, ADDITIONAL SUPPORT, AND RESOURCES

Confidential Reporting

Many of our daily responsibilities and professional expectations have changed during this unusual crisis, which can understandably lead to confusion and questions. Confidential reporting of concerns is available through:

- the University's Confidential Reporting and Help Line
- the Office of the Ombuds, which welcomes any member of the Penn community who is experiencing difficulty, conflict, or confusion in his or her work, studies, or life at the University more broadly

Return to work in the early phases must remain voluntary, and no one should feel undue pressure to return. If such pressure, either perceived or actual, is felt, reporting to the department chair or center/institute director is highly encouraged.

Violation of any of the guidelines we have put in place, including those related to social distancing and the voluntary return to work, may result in the immediate shut-down of laboratory activities, as well as corrective action.

Additional Resources

- Resources to available programs, from housing assistance to back-up child and senior care

- Self-care strategies and ways to connect with others

- Counseling and Psychological Services

- PennCobalt, a new web-based platform which provides curated behavioral health and wellness content as well as group and individual support. Answer a few questions to receive personalized recommendations on the articles and exercises that are most relevant to you, reserve your seat in a session focused on mindfulness or anxiety reduction, and schedule time to connect one-on-one with our mental health coaches and clinicians.

- BioRAFT Observe Now feature is available for reporting concerns

- At any time, please refer to the Research Resumption Strategy Master Plan developed by the Office of the Vice Provost for Research.
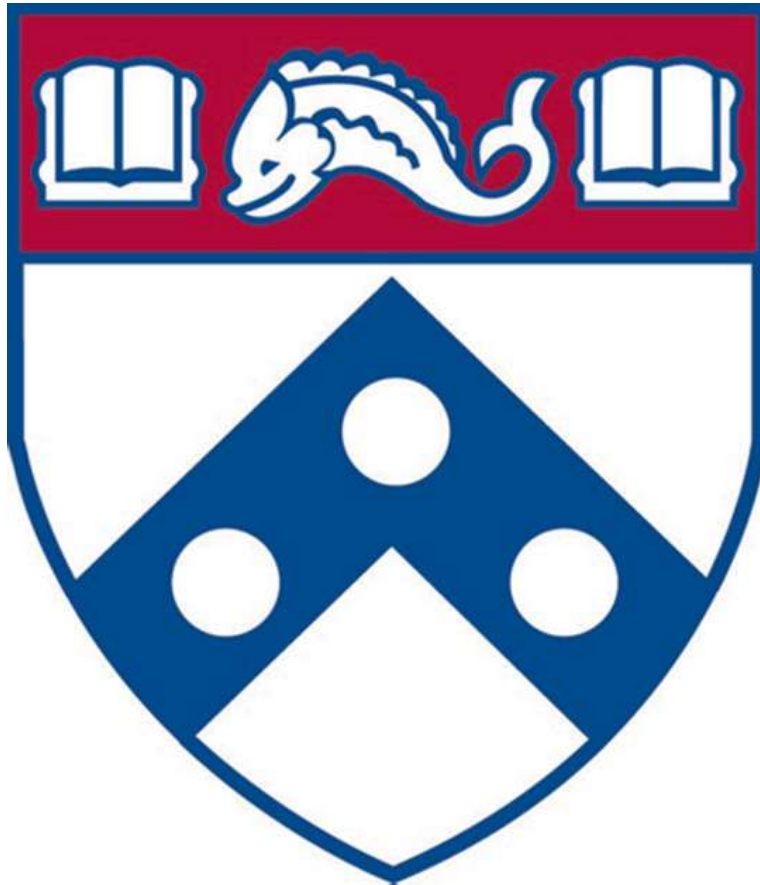
Acknowledgements:

Perelman School of Medicine COVID-19 Mission Continuity Team and Faculty Contributions:

Source Materials from:
- Centers for Disease Control and Prevention
- Office of the Vice Provost for Research at the University of Pennsylvania
- Environmental Health and Radiation Safety at the University of Pennsylvania
- Penn Medicine Communications and Marketing

APPENDIX

Opt-In Process to Resume Lab Research for PhD Students and Postdocs

Need for Opt-In Process

Per the University's [Research Resumption Guidelines](#):
"Participation of graduate students and postdocs is voluntary. As part of the Research Resumption Plan, Schools and graduate groups, in collaboration with the School's Graduate Deans, are responsible for establishing processes for students to opt into research. The opt-in process should not involve faculty mentors; trainees should be allowed to decide independently. In addition, we strongly encourage scheduling flexibility in consideration of childcare, elder care, transportation concerns, and safety."

Requirements for Opt-In Process

1. Trainee registers desire to opt-in via a secure application, ideally one that's Pennkey authenticated
2. Trainee is provided with context prior to being given options (example of text below):
In preparation for Phase I of the return to research, we are asking whether you volunteer to return to work on the Penn campus. Remember that returning to campus is strictly voluntary, and that there are multiple reasons that you may want to continue working from home. For example, you could have an underlying health condition, or have contact with an elderly or vulnerable individual, or have child care responsibilities. You may have no way of safely commuting to work (we do not want you to take public transportation). You may just feel uncomfortable about being on campus. We do not need to know the reasoning behind your decision, only whether you volunteer to work on campus. If you are ready to return to campus, please certify your readiness by indicating below. If you are not ready to return to campus, please log out.
3. Trainee certifies "I volunteer to return to campus at this time"
4. Trainee's decision can be reported on and shared with:
   - Supervisor (thesis advisor/PI)
   - Supervisor's department chair
   - For PhD students - student's school (aka division in SRS)
     - Ideally also by grad group, program, student type (PhD, MD-PhD, etc.) as well
   - For postdocs – BPP office

System for Opt-In Process

KnowledgeLink – Biomedical Graduate Studies and Biomedical Postdoctoral Programs are working with PSOM Office of Organizational Effectiveness to develop this opt-in process. Goal is to have process in place by the start of Phase 1, 6/1.