

UMD SAFETY ASSUREDNESS PROCEDURES & GUIDANCE PLAN FOR CONDUCTING RESEARCH DURING COVID-19: UPDATE AUGUST 2020

This document is intended to provide guidance for University of Maryland College Park (UMD) Principal Investigators (PIs) in consideration of research on campus during COVID-19, and to provide a framework for investigators to build their Safety Assuredness plan. Below are a) the Guiding Principles for the Re-opening of Research developed by the UMD COVID19 Research Advisory Task Force, and b) the Fundamental Requirements for Re-opening and conducting research during COVID19, which are derived from input from the Task Force, UMD, and external resources, both of which are endorsed by the University Health Center and the Department of Environmental Safety, Sustainability and Risk.

NOTE: This document is updated from the original document, *Phase 0/Phase 1 Safety Assuredness Procedures and Guidance Plan for Reopening Research (Safety Assuredness Plan)*. This updated document contains new information on all aspects of performing research on campus under COVID 19 limitations and restrictions. If you have not previously completed the original document, you must complete this updated form in its entirety. If you have an approved *Safety Assuredness Plan* in place in Phase 1 and you wish to move to Phase 2 for your research spaces, you must review the information contained here and update Sections 1 and 2 pertaining to physical distancing as physical distancing requirements vary in Phase 1 and Phase 2. An addendum checklist is provided at the end of this form, with relevant campus updates during Phase 1.

The specific requirements pertaining to individual plans for re-opening are subject to evolving federal, state, and local regulations, as well as changes to UMD and the USM guidelines and that further communications providing additional information or details will be forthcoming.

University of Maryland Guiding Principles for Research During COVID-19

1. Follow local, State, and federal laws, regulations, ordinances, and Executive Orders or other administrative orders, including but not limited orders to stay-at-home and implement social distancing.
2. Follow additional guidance and best practices issued by cognizant local, State, and federal public health authorities.
3. Prioritize physical and emotional health and safety of our campus community, our visitors, and our human research subjects.
4. Make every effort to accommodate those who are uncomfortable coming to campus.
5. Prioritize the support and cultivation of early-stage researchers: untenured faculty, postdoctoral fellows, and doctoral students. They are the drivers of the future research enterprise.
6. Recognize that undergraduates are students first, researchers second. Graduate students are students first, with research as an integral part of their education.
7. Implement a fair, transparent, and equitable process for granting access to research space.
8. Ensure that the restart of research is as rapid as the public health conditions permit.

9. Build in institutional and individual flexibility and resilience in the solutions we adopt in case severe restrictions must be invoked again.
10. Create a rich learning, mentoring, and discovery experience for researchers in a flexible environment. Cultivate a spirit of radical creativity in research. Decide now what the future of research will be.

Fundamental Requirements

- No research activities in Phase 1 or Phase 2 will be allowed unless a reopening request has been granted by Deans. Research involving human subjects requires completion of a [UMD Resuming Human Subjects Research Plan template](#) and must also be approved by the Deans and the Vice President for Research (VPR).
- Principal Investigators must develop plans for reopening and working in research spaces. These plans must be consistent with State of Maryland and Prince George’s County laws, regulations, ordinances, and Executive Orders (as well as other applicable laws and regulations) and University guidelines, and the plan must be approved by the applicable Department Chair and Dean.
- Plans should include specific details as set forth in this guide. The VPR will provide updates to these requirements, based upon evolving conditions, regulations, and guidelines.
- Occupancy limits in Phase 1 and Phase 2 shall follow guidelines set forth in this plan.
- Researchers should implement all available mechanisms for ensuring health and safety [umd.edu/4Maryland] and participate in UMD supported health screenings, contact tracing, population COVID surveillance testing, and other means of controlling the spread of COVID-19 within the UMD campus community.

SECTION A. IDENTIFICATION OF RESEARCH SPACES & PERSONNEL

1. PRINCIPAL INVESTIGATOR OF THE RESEARCH SPACE

Name(s):

Contact Information:

2. LIST ALL RESEARCH SPACES

Key considerations:

- A “research space” is a specialized area or room containing equipment, materials, or physical parameters where a physical presence is necessary to conduct research. Offices are not considered labs or research spaces; however, an office or room with specialized equipment and materials used in the conduct of research, is considered “research space” and is to be included in the plan. Researchers should continue to work remotely as much as possible.

BUILDING	FLOOR/ROOM NUMBER OF LABORATORY/ROOM/STUDIO/SPACE	SQUARE FOOTAGE IN THE SPACE ⁽¹⁾	SHARED SPACE ROOM (Y/N)

(1) Building floor plans with dimensions to calculate square footage can be found at facilities.umd.edu.

3. LIST ANTICIPATED CORE FACILITY USAGE FOR PLANNING & COORDINATION

BUILDING	FLOOR/ROOM NUMBER OF CORE FACILITY/SHARED SPACE	SQUARE FOOTAGE IN THE SPACE ⁽¹⁾

(1) Building floor plans with dimensions to calculate square footage can be found at facilities.umd.edu.

4. PERSONNEL APPROVED TO PERFORM RESEARCH OR ESSENTIAL SERVICES ON-CAMPUS

Key considerations:

- A “**researcher**” is a Principal Investigator, research faculty, post-doctoral trainee, graduate student, or staff member whose work takes place in a research space.
- Researchers will minimize their time on campus and those who can continue to work remotely will do so.
- Researchers can freely raise concerns about any health and safety matter to the Principal Investigator, Department Chair, Dean, Human Resources, [UMD’s Ethics, Integrity and Compliance Reporting](#) system and/or the Department of Environmental Safety, Sustainability & Risk. [See Division of Research [Whistleblower Protections](#).]

NAME	POSITION/APPT TYPE	EMAIL	CELL PHONE

SECTION B. PRINCIPAL INVESTIGATOR PLAN

1. PHYSICAL DISTANCING – OCCUPANCY PER RESEARCH SPACE

Key considerations:

- Review the UMD Fall 2020 Reopening Plan webpage – [4Maryland](#) to obtain all the latest UMD requirements, campus updates, resources, FAQs, UHR guidance and other campus information and support.
- The PI must establish a plan for the research space occupancy to ensure physical distancing.
- Review the “[UMD COVID-19 Physical Distancing Guidance for Facilities](#)”. It includes contacts for resources and assistance with procedure development or fabrication of physical distancing barriers.
- Require physical separation of at least 6 feet apart in the research space, offices, and break areas.
- Limit the square footage per researcher permitted by the University based upon each space:
 - Phase 1, 25% occupancy and not to exceed 1 person/room or 200ft²;
 - Phase 2, 50% occupancy and not to exceed 1 person/room or 150ft².
 - Building floor plans with dimensions to calculate square footage can be found at [facilities.umd.edu](#).
- Design workflow to minimize the need for researchers to pass frequently by one another.
- The [4Maryland Tool Kit](#) has links to obtain floor signs and postings.
- Departments must follow the UMD guidelines for affiliates, vendors and visitors; guidelines will become available at [4Maryland](#).
- Post signage at research space entry doors noting permitted occupancy based upon the determined available square footage.
- If demarcating physical distance requirements with physical barriers, be sure it is safe to do so. **IMPORTANT:** Barriers must not block egress and other fire/lift

safety equipment, sprinklers, electrical panels, etc. Review the [Fire Marshal FAQs](#) and contact [ESSR Fire Marshal's Office](#) for a review or approval.

- Use signage to mark areas and/or workstations for permissions of use or research space-specific rules (e.g., 1 person per workstation, scheduling plan, point of contact for shared spaces or equipment, cleaning and disinfection rules, PPE requirements, etc.).
- Be mindful of elevator use; limit occupancy based upon social distancing requirements.
- Follow all posted traffic patterns inside the building hallways, stairwells, etc.

RESEARCH AREA SPECIFIC INFORMATION FOR PHYSICAL DISTANCING - OCCUPANCY:

[ADD ADDITIONS HERE]

2. PHYSICAL DISTANCING - SCHEDULING OF WORK HOURS

Key considerations:

- The PI must establish a plan for the management of work hours to ensure physical distancing measures can be maintained.
- Consider staggering hours, scheduling individual/teams shifts per day, and work after-regular hours to limit density.
- Conduct all meetings virtually, to the best extent possible.
- Include the allowance of time for individuals to clean and disinfect all surfaces, including research equipment, per Section B.5.
- Plan for emergency and incidents. Note the [University Health Center's hours and staffing](#) may affect response procedures for minor research laboratory related incidents.
 - For all emergencies, continue to call UMPD at 301-405-3333 or 911.
 - For minor, lab-related incidents (minor cuts, needle sticks, animal bites, etc.):
 - During operating [hours](#): CALL the Walk-in Clinic directly at 301-314-8157 BEFORE going to UHC.
 - After operating hours: call the After-Hours Nurse Line at 877-924-7758 for a consultation; UHC will coordinate with a local facility to obtain medical care, as necessary.
 - Report all work related injuries/illnesses directly to Rebecca Giannakos at giannakos@health.umd.edu.

RESEARCH AREA SPECIFIC INFORMATION FOR SCHEDULING:

[ADD ADDITIONS HERE]

3. PERSONAL HYGIENE BEHAVIORS TO REDUCE VIRAL SPREAD

Key considerations:

- Review the requirements set forth in the [4Maryland UMD Health & Safety Plan](#).
- Researchers coming to campus will complete the [Requirements for Returning to Campus](#), including the [Daily Symptom Monitoring Requirement](#) and [mandatory COVID-19 testing](#) as communicated within the [UMD Health & Safety Plan](#).
- The [UMD Print Services Digital Storefront](#) offers a COVID-19 catalog of health and safety related items for departments returning to campus. This includes face shields, hand sanitizers, plexiglass guards, gloves and more.
- Researchers will not come to campus if feeling unwell for any reason.
- Researchers will wear cloth face coverings when inside buildings and outdoors when in the presence of others.
- Researchers will cover their mouths and noses when sneezing or coughing and use best practices for hygiene, including coughing or sneezing into a tissue and immediately throw it away; use arm or sleeve to cover face if no tissue available; wash hands afterward with soap and water for at least 20 seconds.
- Researchers will use best efforts to avoid touching their eyes, nose and mouth.
- Researchers will wash their hands for 20 seconds using soap and water frequently throughout the day, wash their hands after contacting surfaces that may have been touched by other persons, and use alcohol-based (at least 60% alcohol) hand sanitizer when a handwashing sink and soap are not available.
- Obtain and post [University available messaging postings](#).
- Consider posting [Center for Disease Control Guidelines](#) in the research space for “[How to Protect Yourself and Others](#)”; “[How to Stop the Spread of Germs](#)”.

RESEARCH AREA SPECIFIC INFORMATION FOR BEHAVIORS TO REDUCE VIRAL SPREAD:

[ADD ADDITIONS HERE]

4. SURFACE CLEANING & DISINFECTION – WORK SPACE AND EQUIPMENT

Key considerations:

- The PI must provide details of the research space, equipment and surface cleaning and disinfection plan. Include the schedule/intervals and the disinfection materials to be used.
- Review the “[UMD COVID-19 Guidelines for Environmental Cleaning and Disinfection](#)” which includes a [laboratory specific cleaning guide](#).
- COVID-19 related protection and cleaning supplies are available through the [Printing Services Digital Storefront](#).
- Before leaving the spaces, all researchers are responsible for cleaning and disinfecting all high contact surfaces that they may have touched, including door and drawer handles, light switches, faucets, phones, and equipment.
- Use EPA-registered household disinfectant suggested for use against SARS-CoV-2 [list can be found at: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars->

[cov-2](#)]. Follow all manufacturer's instructions for use, including concentration and contact time.

- If bleach is used, make a 1:10 dilution of household bleach, which has a high efficacy against SARS-CoV-2. Bleach solutions will be made fresh every 24 hours to ensure potency. Note, bleach is corrosive to stainless steel and should not be used on this surface; a 70% ethanol solution is preferred.
- Consider cleaning and disinfecting electronics with alcohol-based wipes or, to reduce the risk of damage to sensitive components, a spray for electronics.
- Common use equipment will be cleaned and disinfected after use. Common use/shared PPE (face shields, safety glasses, laser safety glasses) that can be cleaned will be disinfected after use.
- Consider wearing clean disposable gloves under special/shared gloves (e.g. cryogen gloves, autoclave gloves).
- Researchers should wash hands before and after the use of shared equipment and shared PPE.
- Researchers will not share lab coats.

RESEARCH AREA SPECIFIC INFORMATION FOR CLEANING & DISINFECTING:

[ADD ADDITIONS HERE]

5. ILLNESS ACTION AND REPORTING

Key considerations:

- The PI must provide a plan for action in the event that a researcher becomes ill or feels unwell while on campus. Review the UHR guidance for supervisors, [Managing Through COVID-19: Returning to Campus](#).
- If unwell for any reason, the researcher should safely shut down lab work and leave campus immediately; report the reason for leaving to the Principal Investigator or supervisor via a phone call - not in person; and contact their healthcare provider for consultation.
- Individuals should report positive COVID-19 test results to the University Health Center and to their PI or supervisor.

RESEARCH AREA SPECIFIC INFORMATION FOR ILLNESS REPORTING:

[ADD ADDITIONS HERE]

6. PERSONAL SAFETY - MEASURES FOR WORKING ALONE AND/OR WHEN LIMITED PERSONNEL ARE ON CAMPUS

Key considerations:

- The PI must ensure that researchers have access to information regarding safety measures.
- Researchers are signed up for UMD Alerts <https://alert.umd.edu>.
- Researchers have the UMD Emergency Number (301-405-3333) programmed into their cell phones.
- Researchers will stay alert and attuned to people and circumstances, keep lab doors closed, limit electronic devices that block hearing or split attention making it difficult to remain vigilant, and follow the “[See Something, Say Something](#)” program to report all incidents to UMPD.
- To keep the building secure, researchers will not prop open exterior doors; when working alone in the research space, researchers must close and secure all doors.
- Consider using the [UMD Guardian App](#) when working alone.
- Researchers are familiar with the location of the exterior emergency blue light phones (<https://prepare.umd.edu/blue-light-phones-0>) for use in any emergency situation.
- Consider requesting a UMPD escort if researchers feel unsafe when walking across campus at night (<http://www.umpd.umd.edu/services/escorts.cfm>).
- When work involves the use of hazardous materials or animals, Principal Investigators must approve the research to be conducted alone, based upon a [risk assessment](#).

RESEARCH AREA SPECIFIC INFORMATION FOR WORKING ALONE:

[ADD ADDITIONS HERE]

7. TRAINING & COMMUNICATION

Key considerations:

- The PI must establish a training and communication strategy regarding the elements of their research-specific Plan developed using this guidance template and the University’s [Health & Safety Plan](#).
- Individuals approved to work on campus must complete the [University Requirements for Returning to Work on Campus](#) including the [Safety Practices and Requirements for Working on Campus Training Video](#) and the “[Terps Protecting Terps](#)” [Community Responsibility Pledge](#). These tools include signs and symptoms of COVID-19 and the actions to take if they are feeling ill at home or on campus.
- Employees should read the [Working Through COVID-19: Returning to Campus](#) guide.
- The Principal Investigator has shared each of the following with group members:
 - The requirements for space occupancy, physical distancing, and other COVID-19 safety measures in research area.
 - The procedures for personal hygiene and self-monitoring.
 - The procedures for the proper use of PPE.
 - The procedures to wear cloth face coverings when in buildings and in the research spaces.

- The procedures to clean and disinfect all surfaces and equipment, including those in the labs/spaces where shared equipment use is planned, and where the cleaning and disinfection supplies are located.
- The procedures for ensuring personal safety, and reporting illness or potential exposure.

RESEARCH AREA SPECIFIC INFORMATION FOR TRAINING & COMMUNICATION:

[ADD ADDITIONS HERE]

SECTION C. PLAN APPROVALS

TITLE	NAME & SIGNATURE	DATE
Principal Investigator		
Department Chair		
Dean		

ADDENDUM: Phase 2 Checklist for Existing Safety Assuredness Plans

ALREADY HAVE A PHASE 1 SAFETY ASSUREDNESS PLAN: This addendum provides a listing of relevant tools and resources communicated during Phase 1. Lead Faculty Members/Principal Investigators may review the full template above and/or use the checklist below to **update their existing Safety Assuredness Plan**, as appropriate.

NO EXISTING SAFETY ASSUREDNESS PLAN: Lead Faculty/Principal Investigators **create a Safety Assuredness Plan**, using the full template above; the template has the up-to-date UMD tools and resources listed below.

Key Phase 2 Plan Update – Laboratory Occupancy & Physical Distancing		
<input type="checkbox"/>	<p>Laboratories will work at MAXIMUM 50% OCCUPANCY. The additional number of researchers in the laboratory will require coordination and clarity of schedules. While updating existing Plans, include these key factors:</p> <ol style="list-style-type: none"> 1. Allow those who can work at home to continue to do so. Gradually bring researchers back with the permission of the Chair and Dean. 2. A 6-foot physical separation is required between researchers; researchers are required to wear cloth face coverings when inside the building. 3. Stagger work hours to ensure (a) occupancy does not exceed 50% capacity and not to exceed 1 person/room or 150ft², and (b) physical distancing requirements are met. 4. Communicate any revised laboratory occupancy plans (updated work space designations, updated work schedules, updated room occupancy) to ensure clarity amongst research teams in Phase 2. 	<p>USEFUL LINKS</p> <p>https://research.umd.edu/news/news_story.php?id=13104</p>
<input type="checkbox"/>	<p>Review the UMD COVID-19 Physical Distancing Guidance for Facilities. The guidance includes contacts for resources and assistance with procedure development or fabrication of physical distancing barriers.</p>	<p>https://umd.edu/4Maryland/physical-distancing-facilities-guidance</p>
UMD 4Maryland COVID-19 Resource		
<input type="checkbox"/>	<p>Obtain the latest UMD requirements, campus updates, resources, FAQs, UHR guidance, and other campus information and support at the UMD Fall 2020 Reopening Plan webpage – 4Maryland.</p>	<p>4MARYLAND</p> <p>https://umd.edu/4Maryland</p> <p>https://umd.edu/sites/umd.edu/files/CampusReturn_Brochure.pdf</p>
UMD Health & Safety Plan		
<input type="checkbox"/>	<p>Follow the requirements set forth in the 4Maryland UMD Health & Safety Plan. Stay up to date on new communication, new requirements, and/or changes.</p> <p>The “Requirements for Returning to Campus” include completion of the following:</p>	<p>https://umd.edu/4Maryland/health-plan</p> <p>https://return.umd.edu/</p>

	<ol style="list-style-type: none"> 1. UMD "Terps Protecting Terps" Training Video, 2. Community Responsibility Pledge [The UHR Community Responsibility Pledge replaces the Safety Assuredness Pledge used by research in Phase 1], 3. Daily self-monitoring and reporting, and 4. Participation in population surveillance testing and mandatory COVID-19 testing as communicated by campus. 	https://uhr.umd.edu/coronavirus/return-to-campus/covid-19-testing-information/
<input type="checkbox"/>	<p>All supervisors should review the UMD guidelines for supervisors: Managing Through COVID-19: Returning to Campus.</p> <p>Managers can ensure employees are following the training and safety protocols by accessing the reports available at return.umd.edu. Two manager reports are available under Additional Resources, a Daily Monitoring Report and a Training report.</p>	https://umd.edu/4Maryland/health-plan https://return.umd.edu/
UMD Guiding Principles for Research During COVID-19		
<input type="checkbox"/>	<p>Continue to maintain each of the UMD Guiding Principles for Research During COVID-19 as outlined in the Safety Assuredness Plan template. Ensure your Phase 2 plans:</p> <ul style="list-style-type: none"> • Emphasize a priority on the physical and emotional health and safety of our campus community, our visitors, and our human research subjects. • Make every effort to accommodate those who are uncomfortable coming to campus. • Implement a fair, transparent, and equitable process for granting access to research space. • Work to accommodate those researchers uncomfortable or unable to return safely to work (including those in high risk categories). 	
Cleaning and Disinfecting, COVID-19 Supplies, FM Resources, and Signage		
<input type="checkbox"/>	<p>Review the UMD COVID-19 Guidelines for Environmental Cleaning and Disinfection. This resource includes a link to ESSR's COVID-19 Cleaning and Disinfection in Laboratories guidance document.</p>	https://www.facilities.umd.edu/fm-covid19/resources https://essr.umd.edu/covid-19-cleaning-and-disinfection-laboratories
<input type="checkbox"/>	<p>COVID Supplies. The UMD Print Services Digital Storefront offers a COVID-19 catalog of health and safety related items for departments returning to campus.</p> <p>This includes face shields, cloth face coverings, disposable face coverings, hand sanitizers, plexiglass guards, gloves and more.</p>	https://www.dbs.umd.edu/print/services/DSF.php

□	<p>UMD Facilities Management (FM) has issued UMD COVID-19 Guidelines for Building Systems and maintains up-to-date FM related COVID-19 FAQs. College Deans or their designees will communicate occupancy of buildings to ensure research buildings in use are reported to FM for HVAC and water quality assessment.</p>	<p>https://facilities.umd.edu/fm-covid19</p> <p>https://facilities.umd.edu/fm-covid19/faqs</p>
□	<p>The 4 Maryland Toolkit includes information on the campus signage campaign, including floor signs and posters departments can print for use.</p>	<p>https://umd.edu/4Maryland/health-messaging-toolkit</p>
□	<p>UMD has developed Contractor Requirements for Working on Campus During COVID-19 and Instructions for Campus Departments on working with Contractors in campus locations during COVID-19.</p>	<p>https://purchase.umd.edu/</p> <p>https://purchase.umd.edu/sites/default/files/uploads/documents/UMDContractorRequirementsduringCOVIDJuly22%2C2020.pdf</p>
<p>Research Planning</p>		
□	<p>Stay up-to-date on Important Information from UMD's Division of Research on the Impact of COVID-19 on Research Activity from the Division of Research, Office of Research Administration. The webpage includes links to communications, requirements and FAQs.</p>	<p>https://ora.umd.edu/COVID19ResearchActivity</p> <p>https://research.umd.edu/news/news_story.php?id=12905</p> <p>https://research.umd.edu/covid19</p>
□	<p>The University Health Center's hours and staffing may affect response procedures for minor laboratory related incidents.</p> <ul style="list-style-type: none"> • For all emergencies, continue to call UMPD at 301-405-3333 or 911. • For minor, lab-related incidents (minor cuts, needle sticks, animal bites, etc.): <ul style="list-style-type: none"> ○ During operating hours: CALL the Walk-in Clinic directly at 301-314-8157 BEFORE going to UHC. ○ After operating hours: call the After-Hours Nurse Line at 877-924-7758 for a consultation; UHC will coordinate with a local facility to obtain medical care, as necessary. • Report all work related injuries/illnesses directly to Rebecca Giannakos at giannakos@health.umd.edu. 	<p>https://health.umd.edu/home/covid-19-uhc-operations</p>
□	<p>ESSR has enabled two laboratory safety BioRAFT self-inspection modules: General Laboratory Safety Self Inspection and the COVID-19 Lab Reopening Checklist. Principal Investigators or a lab member designated as a group compliance liaison will be able to use the Self Inspection tools for laboratory safety readiness.</p>	<p>https://essr.umd.edu/research-safety/bioraft-information</p>
□	<p>The Office of the Fire Marshal has posted FAQs addressing questions raised regarding modifications that can be made in buildings to improve COVID infection control for occupants. These include propping open doors and placing barriers for protection. Maryland State Law under the State of Maryland Fire Prevention Code (COMAR 29.06.01) may limit certain options.</p>	<p>https://essr.umd.edu/faq-fire-life</p>