UNIVERSITY of GUELPH

Research Phase-In Framework

June 12, 2020

UNIVERSITY of GUELPH

OFFICE of RESEARCH

Updated June 29, 2020

Preface

This document is intended to provide a framework for the University of Guelph to gradually phase in research activity that has been curtailed by the COVID-19 pandemic.

University of Guelph significantly scaled back or shut down many research activities in response to the declaration of a state of emergency made by the Province of Ontario on March 17, 2020.

In the time between March 17th and June 12th, some research was approved for continuation on the basis of its time sensitivity and/or critical nature.

With the Wellington-Dufferin-Guelph region entering Stage 2 of the Province of Ontario's re-opening plan on June 12th, the University of Guelph is now positioned to begin to resume more of our research activities.

This document lays out a framework, including principles, responsibilities, and guidance, to enable more research to resume in a measured, gradual fashion, where a premium is placed on ensuring the collective health, safety, and well-being of the members of the communities in which we live.

This document should be used by colleges, academic units, and researchers to develop and approve the plans necessary to start to bring reasonable research activities on line, beginning Monday, June 29, 2020.

Beyond June 29th, this document should be used to guide further, measured phase in of research.

Critically, as per the principles, this document is meant to support the safe resumption of research activities.

It should also be recognised that, due to the changing state of affairs related to the pandemic, this framework may be modified, replaced, or superseded by other plans or directives as necessary. This might also entail curtailing research that has been initiated under this framework.

This said, as a research-intensive university, it is our hope that this framework allows us to resume as much of our research as is safe and practical to achieve.

Principles guiding research phase-in

I. Our actions place at the fore our responsibility to ensure the collective health, safety, and well-being of members of the communities in which we work and live.

II. Access to research facilities should be expanded in a measured way, as it is safe to do so.

III. Any research that is undertaken must be prepared to be contracted as quickly as is necessary to keep people safe if and when conditions change.

IV. Research that can safely and effectively be conducted remotely without the physical use of University of Guelph operated facilities (including offices and field sites) should be conducted remotely, even if it could be done on campus consistent with health guidelines.

V. If research cannot be conducted remotely without the physical use of University of Guelph operated facilities (including offices and/or field sites), priority will be placed on research that is critical and/or time sensitive in nature. Determination of whether research is critical and/or time-sensitive will consider multiple factors, including risks to important/timely impact (e.g. COVID-19 research, seasonally-dependent research, research reliant on the life cycle of living organisms, research reliant on limited availability of crucial resources), risks to researchers' career progression, and institutional risks (e.g. failing to fulfil non-renegotiable contracts, damage to long-term research infrastructure).

VI. Decisions pertaining to prioritisation of research according to the above will largely be determined by colleges. Decisions about priority must be made transparently and must take into account equity, diversity, and inclusion (EDI). Decisions about priority must take into account risk/liability for the researchers and the institution, as well as practicality and feasibility of Research Management Plans.

VII. Research can only proceed provided it can be done safely and is properly resourced. This includes adequate staff training, availability of PPE, facility support services, and financial supports.

VIII. Operational plans must be in place for the research to proceed. This includes approved Research Management Plans, as well as plans for personnel access to space, workflow within work spaces (including non-research work spaces such as hallways, washrooms, and common spaces), and associated training.

IX. Researchers can make use of non-university sites (e.g. archives, field locations, conferences) as soon as they become available, according to the principles above. These principles apply to travel to and from non-university sites to conduct research, as well as research that may result in proximity to external parties, such individuals owning, operating, working, or living within external sites.

X. Human subject research that can be conducted without physical proximity should be done so virtually/remotely. Researchers wanting to engage in critical and/or time-sensitive in-person research activities involving human participants require Research Ethics Board approval and must conform with the principles described herein to ensure studies are conducted in a safe and effective manner, where any face-to-face interactions integrate current procedures and provisions from public health authorities to protect researchers and participants, alike.

XI. Researchers seeking to resume in-person research activities with live animals must adhere to previously approved animal utilisation protocols or submit amendments, if changes are necessary to conform to the principles described herein, for the normal process of Animal Care Committee review and approval. Research protocols using live animals must be conducted in a safe and effective manner and should integrate current procedures and provisions from public health authorities to protect researchers and animals, alike.

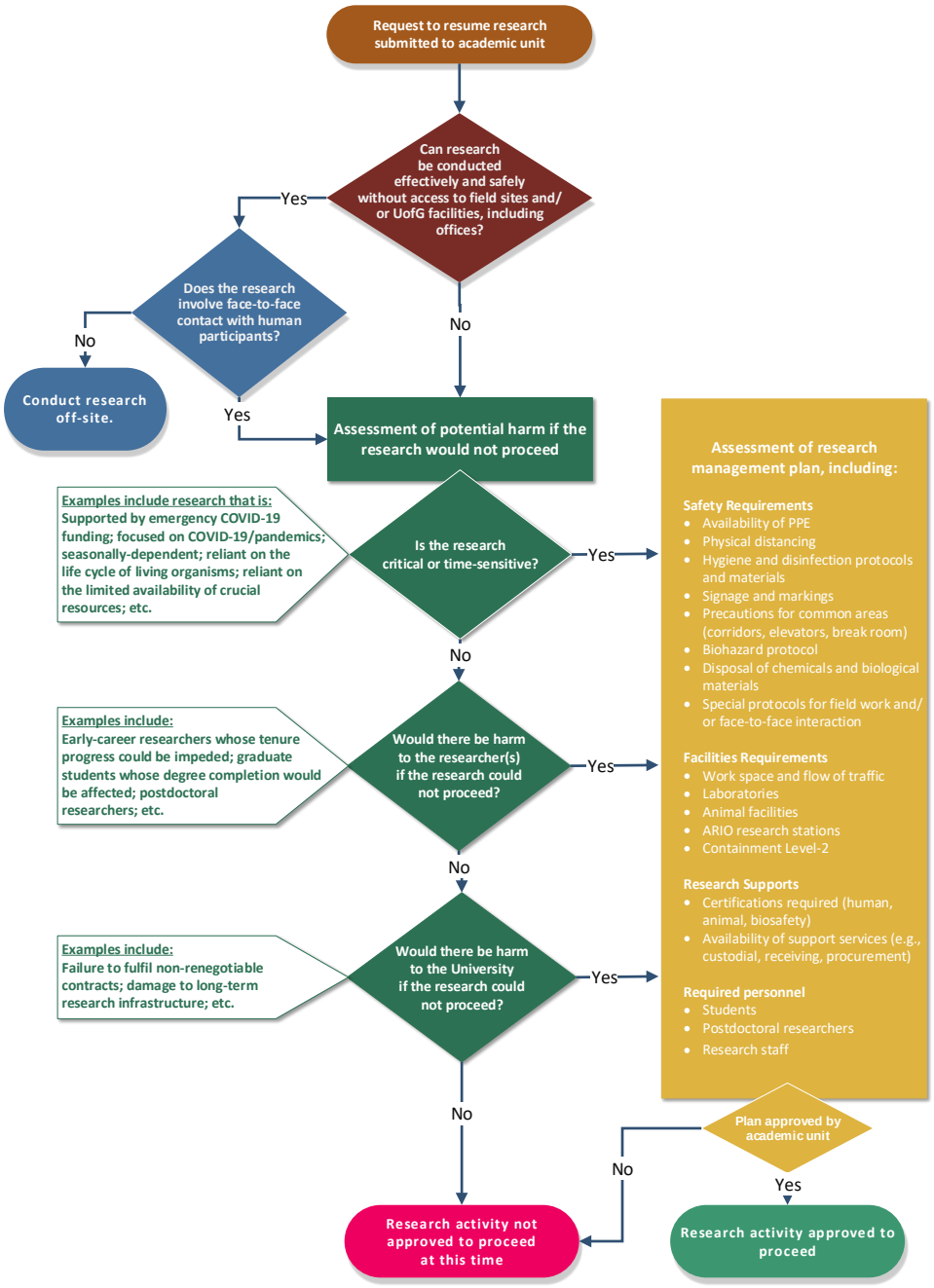
XII. Researchers retain responsibility for team members under the principle of duty of care. All PIs and personnel who pursue research have a duty of care for themselves and others to protect all from the transmission or exposure to the virus.

XIII. The phasing in of access to University of Guelph operated research facilities, or the increased availability of other research sites, should not be taken to imply that researchers are expected to access these research spaces. Researchers may have on-going health concerns, or other COVID-19–related reasons to defer the conduct of any non-remote research.

XIV. There will be ongoing institutional oversight to ensure that all approved research continues to adhere to the principles, including research at non-university sites.

Approval process for research phase-in

Please note, in addition to the approval process outlined in the below flowchart, researchers, including graduate students, should only conduct research once their academic unit or college has notified the Office of Research of their approved Research Management Plan and the notification has been confirmed


Request to resume research submitted to academic unit
Can research be conducted effectively and safely without access to field sites and/ or UofG facilities, including offices?
Yes
No
Does the research involve face-to-face contact with human participants?
No
Conduct research off-site.
Yes
Assessment of potential harm if the research would not proceed
Examples include research that is: Supported by emergency COVID-19 funding; focused on COVID-19/pandemics; seasonally-dependent; reliant on the life cycle of living organisms; reliant on the limited availability of crucial resources; etc.
Is the research critical or time-sensitive?
Yes
No
Examples include: Early-career researchers whose tenure progress could be impeded; graduate students whose degree completion would be affected; postdoctoral researchers; etc.
Would there be harm to the researcher(s) if the research could not proceed?
Yes
No
Examples include: Failure to fulfil non-renegotiable contracts; damage to long-term research infrastructure; etc.
Would there be harm to the University if the research could not proceed?
Yes
No
Assessment of research management plan, including:
Safety Requirements
Availability of PPE
Physical distancing
Hygiene and disinfection protocols and materials
Signage and markings
Precautions for common areas (corridors, elevators, break room)
Biohazard protocol
Disposal of chemicals and biological materials
Special protocols for field work and/ or face-to-face interaction
Facilities Requirements
Work space and flow of traffic
Laboratories
Animal facilities
ARIO research stations
Containment Level-2
Research Supports
Certifications required (human, animal, biosafety)
Availability of support services (e.g., custodial, receiving, procurement)
Required personnel
Students
Postdoctoral researchers
Research staff
Plan approved by academic unit
No
Yes
Research activity not approved to proceed at this time
Research activity approved to proceed

Responsibilities related to research phase-in

Office of Research

- Establish framework for research phase-in, and modify as necessary.
- Monitor the research phase-in process.
- Provide guidance related to research phase-in.
- Coordinate with other university activities related to research phase-in.

Environmental Health and Safety

- Identify and facilitate best practices of COVID-19 safety.
- Conduct safety visits and audits in research spaces.
- Consultation as needed.

College Deans (or designates)

- Oversight of process for prioritisation of research to proceed.
- Oversight of review and approval of Research Management Plans (see "Research Management Plans" below).

Academic Unit Chairs and Directors (or designates)

- Determine and approve which research groups need to be on site to conduct research and which groups are able to work remotely.
- Review and approve Research Management Plans (see "Research Management Plans" below).
- Monitor for compliance with Research Management Plans.
- Provide support as required for research groups needing to restart.

Principal Investigators / Research Supervisors

- Develop and implement Research Management Plans including specifics for the use of research space and shared equipment (see "Research Management Plans" below).
- Determine which personnel need to be on site to support the research activities, integrating individual considerations such as:
    - Request for accommodation due to high-risk health status (i.e. category considered high-risk by provincial public health officials).
    - Caregiving obligations and accommodations (the status of day cares and schools will shift through phases).
    - Travel and mitigating fear around use of public transportation.
- Confirm that measures taken to ensure appropriate physical distancing in the research spaces are compliant with accessibility requirements.

- Ensure all personnel in the research space are provided with appropriate communications, instructions, training, personal protective equipment (PPE), instructions and other resources as identified by the Research Management Plan.
- Protect physical and mental health and safety by addressing employee and student concerns.
- Ensure that high-touch shared equipment surfaces within the research space are regularly disinfected before and after use.
- Create and maintain a schedule to ensure that low occupancy and two-metre physical distancing requirements are met within the research space and monitor compliance to the schedule.
- Ensure compliance with the Research Management Plan.

Research Space Users and Workers

- Work remotely as much as possible and only be present in the space if necessary.
- Stay home if feeling unwell or are experiencing symptoms.
- Review and follow instructions in the Research Management Plan.
- Report hazards and concerns to supervisor.
- Use equipment and/or PPE as defined in the procedures.
- Minimize time around people (maintain two metre physical distancing at all times).
- Remember that some individuals with COVID-19 may be asymptomatic.

Research Management Plans for research phase-in

Principal Investigators (PIs) are responsible for developing and implementing appropriate college-approved Research Management Plans for their research spaces, including remote locations such as field sites and archives, and for ensuring the training of their personnel on appropriate cleaning and disinfecting, hand hygiene, and respiratory etiquette. EHS will provide training and resources for general COVID-19 safety and precautionary measures, but PIs must monitor and ensure their personnel have been trained.

The operating principle as research activities are resumed initially for clinical/field/social science research involving human subjects or contact with the public is to limit the exposure of researchers and members of the external community in the course of their research activities.

The infection and spread of SARS-CoV-2 in any research facility will likely require a return to essential activities only, or even greater restrictions depending on the location and circumstances. Therefore, all research plans should include contingencies for immediate scale-back or shut down. Orders for "perishable" materials, including animals, should be restricted to meeting the immediate needs of the research being conducted. Those who have frozen biological specimens should also consider the possible need to refreeze samples if it becomes necessary to reduce research activities again.

Researchers working with living organisms should continue to wear the appropriate PPE and observe the appropriate protocols for their research. It is recognized that some procedures, such as surgeries,

may require multiple personnel to work in close proximity. Such activities should be carried out with the minimum number of personnel feasible and allowable. Activities that involve participation of other personnel, for example, animal care, should be organized such that the minimum number of people are present at any time. Any deviations from approved protocols must have prior approval by the appropriate body.

For research involving human subjects, these plans must be submitted to and approved in writing by the appropriate academic unit head (department head or school director). Research involving human subjects will require additional approvals. Colleges may require review and approval of these plans. They may also implement access control and screening procedures for buildings and spaces within them under their control.

While the details of plan construction will be determined by Colleges, Research Management Plans should minimally integrate consideration of the following:

Safety Requirements

- Availability of Personal Protective Equipment (PPE)
- Physical distancing
- Hygiene and disinfection protocols and materials
- Signage and markings
- Precautions for common areas (corridors, elevators, break rooms, etc.)
- Biohazard protocol
- Disposal of chemicals and biological materials
- Special protocols for field works and/or face-to-face interactions

Facilities Requirements

- Work space and flow of traffic
- Laboratories
- Animal research facilities
- ARIO research stations
- Biocontainment level-2

Research Supports

- Certifications required (human, animal, biosafety)
- Availability of support services (e.g., custodial, receiving, purchasing)

Required Personnel

- Students
- Post-doctoral researchers
- Research staff

The guidelines below provide directives and guidance that should considered and, as appropriate to the research in question, integrated into Research Management Plan.

Guidelines for research phase-in

Equity, Diversity and Inclusion (EDI) Considerations

The University of Guelph recognizes that an inclusive campus and a culture of inclusion is an institutional and social imperative. Acknowledging the University's diverse population and ensuring that every member of an inclusive campus is a valued contributor is a foundational pillar of a successful post-secondary institution.

The following principles drive the University's commitment to equity, diversity, and inclusion (EDI):

- All campus community members must anticipate and encourage diverse perspectives and leverage them to drive creativity and innovation
- A culture of inclusion begins by acknowledging the diversity among us and recognizing that some members of our community experience barriers to education, employment, and full participation due to systemic factors
- A culture of inclusion is possible only if the institution continually designs, reviews, and rebuilds structures – including policies, programs, and practices – that are inclusive, equitable, and accessible to all
- A culture of inclusion necessities the involvement of the community of diverse stakeholders – faculty, staff, and students – to drive a strategic and system-wide approach to EDI

The institution is committed to identifying barriers to full participation that exist for equity-seeking groups and ensure, upon identifying and striving to eliminate those barriers, that equity-seeking groups experience a sincere and genuine sense of belonging in the campus community. Particularly at this time, where there are multiple demands on one's time between caregiving and employment responsibilities, we all bear responsibility to do our outmost to reduce barriers to those wanting to resume their research programs

- Share the handbook, "An Equity, Diversity, and Inclusion (EDI) Handbook for Individuals and Organizations During COVID-19", which was developed by the Office of Diversity and Human Rights.
- Provide confidential and/or alternative venues for faculty members to provide feedback on research phase in.

General guidelines

As preparation for and resumption of research activities commences, protective measures will remain essential. Please refer to the University's COVID-19 related guidelines available on the EHS website. Protective measures and preparation for resuming activities include:

- Using provincial self-assessment criteria, self-assess signs or symptoms of possible COVID-19 before coming to University of Guelph operated facilities. Do not come to work if ill or

exhibiting signs or symptoms of COVID-19.

- Maintain physical distancing at all times.
- Maintain good personal hygiene, including proper hand washing, respiratory etiquette (for coughing and sneezing), and avoid touching your face, eyes, nose, and mouth.
- Have hand sanitizer available at all building entrances and at access points for each floor.
- Ensure access to adequate and reliable supply of appropriate PPE. Use appropriate Personal Protective Equipment (PPE) to protect oneself and others from the spread of the virus while within all University of Guelph operated facilities. Current guidance on appropriate PPE to be used to prevent spread of the virus can be found on the EHS website.
- Clean/disinfect high-touch locations in shared spaces, including laboratories.
- Recalibration or certification of certain equipment, particularly related to safety, before resumption of use.
- Access to necessary research supplies and materials, including ordering, shipping, receiving, and delivery locations.
- Access to supplies of research animals, including necessary animal care activities.
- Access to and protocols for use of shared resources such as libraries, computing facilities, core facilities, etc. will be determined by the management of each facility.
- Access to site-specific protocols for University of Guelph-operated research stations and facilities during COVID-19 pandemic.

Mandatory hygiene procedures for all research locations/personnel include:

- All personnel must wear appropriate face coverings (i.e., use of a material to cover the nose and mouth, not a valved mask).
- Cleaning of all door and cabinet handles, bench surfaces, keyboards, instrument control panels, etc. at the beginning and end of the day, or, if researchers are working in shifts, at the beginning and end of every shift.
- All shared equipment, including computer keyboards and tables should have user interface surfaces cleaned by users between every user.
- Other "high touch" items such as hand tools, micro-pipettes, faucet handles, chemical and spray bottles, chair backs and arm rests, photocopiers, pens and whiteboard markers should be cleaned between users.
- Cleaning should be with an approved disinfectant that is effective against COVID-19 in addition to the other biohazardous agents that may be in use. Attention must be paid to disinfectant contact times; most disinfectants do not work on contact.
- Use appropriate PPE when using disinfectants/cleaning, including eye protection and chemical compatible impervious gloves.

Use of research spaces should factor in the following:

- Continue remote work to the extent possible for activities such as literature review, data analysis, and writing.
- When feasible, establish rotating shifts for research team members who normally use a shared space, and where physical distancing within that space is not possible.
- For laboratory-based research, lab occupancy should be limited to those necessary to conduct the research. Physical distancing may require significant revision of normal procedures. This may require reducing laboratory occupancy.
- Maximum density should be kept to less than 1 person per 9.2 m^2, with no more than 1 person per 3 metres of laboratory bench, hood, glove box, biosafety cabinet, etc., at any time.
- Establish tailored flow through doorways, e.g., designate and label an entrance and exit door for each laboratory where feasible.
- Establish and post schedules for the use of each research space and/or piece of shared equipment, including names for all users. This includes facilities that are shared by multiple research groups. Sign-in sheets are recommended for any space or instrument with four or more users, and in any small research rooms accommodating only 1 person (<9.2 m^2).

Field research

Field activities in low density locations such as agricultural sites and nature areas will be permitted when the research is seasonally-dependent and as long as physical distancing requirements can be met. Please refer to the University's COVID-19 guidance for travelling in a motor vehicle. These activities may be expanded to those that are not seasonal or time dependent, providing that interaction with members of the public is minimized and physical distancing is maintained at all times including when traveling to/from and working at field sites.

Travel

Travel to off-campus research sites, including sites throughout Canada, should be done only if deemed necessary. If making travel plans, refer to the University's guidance on travel during COVID-19.

Anyone planning international travel should follow advice on the Government of Canada's travel advisory website. At this point, the Government of Canada recommends avoiding all travel outside of Canada.

People arriving or returning to Canada from any international destination, whether for business or personal reasons, must self-monitor for symptoms and self-isolate for 14 days, in keeping with the Government of Canada's directive. Monitor for fever, cough and difficulty breathing, and report any symptoms to your health care provider or to Public Health.

All University-funded or sponsored travel to countries outside of Canada is cancelled/postponed until further notice. This applies to faculty, staff, students and researchers, and includes international exchanges and placements.

For researchers, U of G travel includes all research-related travel that requires a travel reimbursement claim from the University of Guelph. Researchers should also take note of the update from CIHR/NSERC/SSHRC pertaining to travel claims related to COVID-19 travel disruptions.

Human participant research

Human subject research activity that can be conducted without physical proximity should be done so virtually/remotely. As always, certification from the Human Research Ethics Board for all research involving human participants must be in place before proceeding with any human subject research.

On-campus research involving face-to-face interactions with human participants requires approval from the department chair, the associate dean research, an *ad hoc* committee with appropriate expertise, and the Vice-President (Research). Such research will require integration of current procedures and provisions from public health authorities to protect researchers and participants, including, but not limited to:

- certification from all participants and researchers that they are not currently experiencing any symptoms of illness now or within the past 14 days and they have not had contact with a known or presumed COVID-19 patient;
- SOPs that address all requirements as applicable to the research activities including screening, physical distancing, maintaining personal hygiene, use of appropriate PPE, cleaning/disinfecting of shared spaces/equipment and infection control; and,
- special considerations for protection of high-risk and vulnerable populations (e.g., older adults, individuals with underlying medical conditions or compromised immune systems).

Research involving animals

Use of animal care facilities should follow the following guidance to ensure health and safety of all staff and users in those facilities:

- All researchers working with animals must have met mandatory training requirements and have the practical skills necessary to competently perform animal-based tasks while adhering to public health directives.
- Reduce the size of your team, even if it means scaling back your research program.
- Research plans using live animals should include plans for contraction of activities on short notice. As an example, consider limiting the number of new animals ordered in light of the possibility that the Province will rescind some re-opening should the number of COVID-19 cases start to increase, to avoid unnecessary euthanasia.
- Meet with your team and animal facility staff virtually whenever possible.
- In advance, work out a schedule for access to equipment with animal facility management and your department or school colleagues, with the goal that everyone has most of what they need

and use is spread out.

- Assign a leader in every team you send out, who is responsible for ensuring physical distancing and proper hygiene for your team, as animal facility staff cannot do this for you.
- Maintain physical distancing of at least two (2) metres and wear an approved face covering.
- Significantly increase the frequency of hand sanitation.
- Send your team with appropriate cleaning/sanitizing supplies so that they can do their part in the continuous cleaning of their own equipment, common equipment and high traffic areas in the field research station. If needed, appropriate concentrated disinfectant solution will be available at each station, from which you can prepare disinfectant solution to be used for cleaning. It must be used according to the manufacturer's instructions. Bring spray bottles, paper towels and disposable gloves (if required by the product) for use.
- Ensure your team has food and drink that does not require the use of appliances in the lunchroom, enabling them to stay out of this common area.

Graduate students

Graduate students who return to university research facilities should do so only when they feel comfortable that their personal health and safety are assured. While this should be achieved through the implementation of safety measures described herein, there may be instances where the implementation of measures is perceived to be incomplete. In such instances, concerned graduate students should communicate their concerns with the Lab Manager and/or research advisor, who is expected to address those concerns either by clarifying perceptions or more fully implementing safety measures. Where a student's concerns are not sufficiently addressed, students should, consistent with the *Policy on Responsibilities of Advisors, Advisory Committees and Graduate Students and Graduate Student-Advisor Mediation Procedures* as outlined in the Graduate Calendar, communicate with and seek resolution from (in order): 1) their Graduate Program Coordinator; 2) Department Chair; and 3) the Assistant Vice-President, Graduate Studies.

In addition to the above mechanisms, all Graduate Program Coordinators are asked to communicate with Graduate Students at the start of the research phase-in period to ensure that students are aware of the above and are comfortable with their return. In cases where students are uncomfortable about returning to University research facilities notwithstanding the full implementation of safety measures, the Graduate Program Coordinator should discuss options for completing alternative research or postponing studies through a Leave of Absence.

APPENDIX: Research Phase-in Checklist

Improve Life.

Research Recovery from COVID-19

The checklist is to be completed by the PI to document plans for physical distancing upon returning to research activities.

Name of Principal Investigator/Supervisor:

Department:

1. General:

☐ I confirm that a plan has been established to quickly scale back or suspend research activities if so required by the University in accordance with Public Health directives

I have reviewed the following with my research team:

- ☐ All personnel are to stay home if sick. If anyone is showing symptoms of COVID-19, they are not to attend work, but rather self-isolate at home and consult their health care provider.
- ☐ Strict hygiene measures including avoiding touching your face, frequent hand washing and good respiratory etiquette are to be followed.
- ☐ Physical distancing (2m separation between yourself and other people) is to be followed whenever possible
- ☐ While there is no clear evidence that wearing a non-medical mask will protect you from the virus, doing so may help protect others around you if you are unable to maintain physical distancing.

2. Physical Distancing

The number of research team members (faculty, staff, students, etc.) who access spaces at any time must be minimized to ensure all individuals can continue to practice physical distancing. Identify the strategies used to minimize people within your research spaces.

	Strategy	**Comments and/or Description**
☐	Shared electronic calendar available to facilitate coordination of schedules between personnel using the same space. *Identify method e.g. Teams, One Drive, etc.*	

☐	Shifts staggered	
☐	Lunch and break times staggered	
☐	Use of common equipment coordinated to avoid multiple people using at a given time	
☐	Teams of personnel who will work at one time have been created to minimize the numbers of discrete contacts with different individuals and limit the impact in the event of a COVID positive case, while also minimizing working alone situations.	
☐	Visual markings have been added to indicate minimum physical distancing	
☐	Equipment has been relocated to support minimum physical distancing	
☐	Workstations have been reconfigured to support minimum physical distancing	
☐	Workstations have been dedicated to one person	
☐	Uni-directional workflow has been established and labelled accordingly (i.e. one-way paths for movement within the space)	

If there are scenarios where working alone will be required, identify how these will be managed_____

3. Hand washing and disinfection

	Consideration	**Comments/Description**
☐	Handwashing soap and paper towels and/or an appropriate alcohol-based hand sanitizer (>60%) are available and supplies deemed to be sufficient.	
☐	Expectations for handwashing/sanitizing have been reviewed with personnel. *Describe expectations.*	
☐	Disinfectant for use on equipment, tools and high-touch surfaces (e.g. faucets, door handles, bench/desk tops, etc.) is available and supplies deemed to be sufficient. *Indicate disinfectant(s) to be used*	
☐	Procedure developed and communicated to research team for disinfection of equipment and high touch surfaces at the beginning of use and before the end of	

	use on a given day, or before its use by another individual	

4. Personal Protective Equipment (PPE)

	Consideration	Comments/Description
☐	Supplies of PPE for research activities have been assessed and are adequate	
☐	PPE for each individual is stored separately	

5. Other

Are there scenarios where personnel will be unable to maintain a physical distance of 2m? ☐Yes ☐ No

If yes, describe:

If yes, identify what additional precautions will be practiced:

☐Non-medical mask will be worn

☐Physical barriers will be implemented

Additional practices implemented:

Please refer to the following for further information:

- Current COVID-19 related guidance for Research at the University of Guelph
- Related COVID-19 guidelines on the EHS website