The Physics plan for re-starting research operations is based on the information provided by the University of Toronto. The following documents are of particular importance:

- **Approach for Research Recovery & Adaptation**
  - Broad goals and identification of stages
- **Guideline for Reopening Research Spaces**
- **Covid-19 General Workplace Guideline**
- **UTogether2020: Guide to Fall 2020 at U of T**
- **UTogether2020: A Roadmap for the University of Toronto**
- **School of Graduate Studies Research Engagement/Re-Engagement Planning**
  - Graduate students engaged in research towards their degree completion retain the right to decide whether or not to return to the research site.
- **Flexible Work Arrangements to Accommodate Staff Caregiving Responsibilities during COVID-19**
- **Considering the Impact on Faculty & Librarians of Caregiving Responsibilities during COVID-19**
- **Department of Physics COVID-19 webpage**

Research will be assessed for re-start according to the following criteria:

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Research requiring immediate on-campus activity</th>
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<td>If divisions need to prioritize research plans based on capacity or readiness restraints, the considerations may include:</td>
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<td>- Research related to SARS-CoV–2/ COVID–19 that cannot be undertaken remotely.</td>
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<td>- Research that, if paused or not allowed to begin, would negatively impact the ability of a graduate student to complete or to begin program requirements and requires minimal on-site work and time to complete.</td>
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<td>- Long-running research in which a serious loss of research material, data, or equipment could occur if the work continues to be disrupted, is at a critical milestone or close to an endpoint.</td>
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<td>- On-going studies that require regular care, conditioning or inspections (e.g., maintenance of cells, or tissues, etc.).</td>
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<td>- Research specifically to address reviewer comments in a manuscript where the response is expected.</td>
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<td>- Research required to meet a contract deadline that cannot be renegotiated.</td>
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<td>- Highly unique research circumstances.</td>
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Stage 2

Research requiring on-campus activity
If divisions need to prioritize research plans based on capacity or readiness restraints, the considerations may include:

- Research that, if not allowed to begin or paused, would negatively impact the ability of a faculty member to meet critical career and grant application milestones.
- Early stage projects and experimental directions.
- Highly unique research circumstances.

Stage 3

Ongoing research in the longer term
- Research that can be undertaken on-campus while COVID-19 remains a community health risk and measures will continue.

Once identified, each research operation will be required to provide a detailed plan for their re-start, including the names, job titles and duties of everyone required, as specified by the Faculty of Arts and Science Research Re-start and Recovery Application Process. The operational plan should include all necessary lab and office spaces.

1. Critical On-Site Tasks

For research re-start the following critical on-site tasks have been identified:

A. Cryogenics Services
   - Sourcing and distribution of cryogenic materials to Physics and other campus research, and to hospitals
   - Support for cryogenic compressor operations and general use of materials
   - Full services to be provided two days per week by Robert Henderson, Cryogenics Facility Manager, on Tuesday, Friday
   - Basic services to be provided by Alex Cui, Stockroom Operations Coordinator, on Monday, Wednesday, Thursday

B. Stores/Receiving Services
   - Sourcing and distributing PPE
   - Receiving incoming shipments of research equipment and materials
   - Provision of other research materials
   - Full services to be provided by Alex Cui, Stockroom Operations Coordinator, on Tuesday and Friday
   - Partial services to be provided by Alex Cui on Monday, Wednesday, Thursday; he will be covering Cryogenics Services at the same time

C. General Building Operations
   - On-going review and adaptation of operations
• On-going support for staff working remotely, including access to paper files, computer access issues, etc.
• Coordination of building services, including mail/receiving, facilities issues
• Coordination of renovation/construction projects
• Coordination of sanitizing tasks
• To be provided by Peter Hurley, Physics CAO, all week, and other staff as required and approved.

D. Physics Technical Services - Machine Shop Services, Electronics Services, Graphics Services
• To provide custom fabrication and mechanical repair services, electronics support
• The machine shop is large and will accommodate the creation of isolated work areas for three staff members.
  o Staffing level and hours will be based on research requirements and transportation and family needs
  o Paul Woitalla – Shop Supervisor and machinist
  o Robert Amos – Mechanical Systems Specialist
  o Rolyn Benedicto – Student Shop Supervisor, welder, and machinist
• The electronic shop will be staffed with one person on an as-need basis, rotating
  o Shuqing Li – Electronics Systems Specialist
  o Robert Morley – Electronics Systems Specialist
• Minimal graphics services will be provided by Peter Hurley, Physics CAO
• A detailed operating plan for PTS is on the Department of Physics COVID-19 webpage

E. Reception
• Reception services, including mail sorting and distribution, and key and general building management
• Staff should be contacted by email first to establish needs and to schedule an appointment if on-site services are required
  o Liz Glover
  o Sheela Manek
  o Office will be open two days a week for full services
  o Partial services will be provided on other days by Peter Hurley

2. Building Access

Starting September 10, the building will be unlocked for student access from 8:00 am to 6:00 pm, or later to accommodate night classes. Signage will prohibit entry to all by members of the University Community, which is hoped will discourage entry by the public. At all other times, the building will remain locked. Only those with keys will have access, but many members of the Department have keys. They will be asked, by email, to refrain from entering the building unless it is absolutely required.
Research operations will require access to the entire basement, where most labs and support services are located, and the parts of the tower, for offices and some labs. The teaching wing will be open for classes.

3. Movement within the Building

At all times, activities in the building must conform with University Policy and all relevant legislation, including the Ontario Health and Safety Act, the Ontario Employment Standards Act. All relevant University directions relating to COVID-19 must be followed.

As of August 10, individuals who are in common-use indoor University spaces will be required to wear masks or face coverings. This includes classrooms, washrooms, service areas, meeting rooms, hallways, lobbies, elevators and other common use facilities. Masks are also required in any situation where measures such as physical distancing and physical barriers are not available.

Corridors on the main floor (entrances) and the basement area are 2.4 m wide, so it is possible for people to maintain appropriate distances. Signage will encourage this.

Corridors in the tower are only 1.7 m wide, so people cannot meet or cross paths with 2 m distancing. Markings are in place to encourage traffic in a clockwise direction. The corners are 2.5 m deep, so there is room to cross or overtake there.

Tower stairwells are 1 m wide. There are two, one on the north side, and one on the south. To avoid crossing, the north stairwell will be marked for upward travel, and the south for downward travel, using appropriately modified UofT approved staircase signage. This will minimize meeting/crossing situations.

The stairwell off the elevator lobby is 1.8 m (6 ft) wide, with wider landings. This is the bare minimum for distancing. Standard University stair signage will be displayed, which encourages distancing.

The upper levels of the stairwell off the main lobby (north) is 2 m wide, providing adequate opportunity for distancing. The lower section is only 1 m wide, and has no good alternatives. It will be posted with UofT approved staircase signage.

The elevators provide adequate distancing for two people. UofT Property Management has posted appropriate signage.

4. Washrooms

Wherever possible, washroom doors will be blocked open to minimize touch surfaces. This is possible for basement washrooms MP0101, MP031 (men) and MP0102 and MP030 (women), and first floor washrooms MP114 (men), and MP115 (women), and second floor washrooms
MP207 (men), and MP213 (women). Most tower washrooms (all-gender, women, men) must have the doors closed when in use. These washrooms will be provided with door-stops so that the doors can be blocked open before hand-washing, allowing exit with clean hands.

5. Sanitizing Touch-surfaces

The Tri-Campus Caretaking Strategy includes provisions for frequent sanitizing of common touch-surfaces, including doors, elevator buttons, washrooms, handrails etc. in public areas. Laboratory supervisors and research Principle Investigators will be responsible for sanitizing touch-surfaces in rooms, labs, and any offices occupied as part of research operations, as required.

6. Eating Spaces

Where possible, and if in compliance with workplace regulations, it is recommended that eating occur at home before and after shifts.

A primary eating space will be provided in MP110. It has a sink for washing, and washrooms with a sanitizer station immediately outside. Individual seating will be provided at tables to accommodate one person per table, for a maximum of ten people in MP110 at any one time. For stage 3, there will be no access to microwave ovens or refrigerators. There will also be a small room available in MP 200. It has a small selection of vending machines, and will have seats for four people. There are no washing facilities close by, but there is a sanitizer station. An eating place for technical support staff will be provided in MP064. It will have properly spaced seating for 5 staff members, and has a sink for hand washing.

People may not eat in labs under any circumstances. Where people have been assigned office space in accordance with all required restrictions, they may eat in the assigned space provided that all food waste be removed from the office daily. Food waste may be taken home for disposal, or put in green waste receptacles found in most common areas in the building.

7. Standard Operating Procedures for Functional Areas

Standard operating procedures have been created for a number of functional areas of the building. These can be found on the Department of Physics COVID-19 webpage. Please note that these procedures will change as the situation develops.

8. General Work Area Guidelines

Wherever possible, research and support staff will be assigned work areas that are private to them while they are working, and provide adequate distancing to others. These areas should be sanitized regularly as recommended in the Guideline for Reopening Research Spaces. If shared work areas are necessary (e.g. on shifts) they must be fully sanitized during change-overs. If it is necessary for people to perform tasks where distancing is not possible, appropriate PPE should
be used. Sharing of equipment or instruments should be minimized, and all items will be sanitized between users.

9. Lab and Room Occupancy

Occupancy of Labs and offices will be set strictly according to distancing guidelines. Regular sanitizing of touch surfaces, and especially common touch surfaces (e.g. light switches, door knobs, etc.) is required. Where necessary, shifts will be arranged to accommodate multiple occupants. There will be no sharing of desks or chairs.

10. Research Group Offices and Mail Room

Research Group Offices will not be fully staffed in Stage 3, but may be staffed on a part-time basis depending on Group requirements. When support staff are present, the Research Administrative Support Standard Operating Procedure will apply. When staff are not present, Group members are permitted to enter the room for normal activities such as accessing mail and using the office machines. Sanitizing material (alcohol, tissues) are available in the rooms, and should be used to sanitize any surfaces (e.g. machine controls, cabinet doors handles) that are touched. The rooms should be secured and locked when not in use.