

**Standard Operating Procedure for Crop Science
Genomics Lab (Rooms 219 and 222)
COVID-19 Research Management Plan**

Manager Contact:

Chris Grainger: 519-824-4120 x 52509, cgrainge@uoguelph.ca

**Note: This is not a departmental facility and access is limited to members of the defined user group that financially support the sustainable operation of the lab.*

This SOP outlines the details for resuming research activities as part of the University of Guelph's Research Phase-in Framework. Please note that both Wellington-Dufferin-Guelph Public Health guidelines as well as University of Guelph Health and Safety policies are to be adhered to in addition to any specific procedures detailed in this SOP.

Objectives & Scope

- The goal of this SOP is to keep personnel safe in the genomics lab, through revised sanitation procedures and social distancing, during the COVID-19 pandemic.
- **Safety is priority one – If you suspect you are ill or have any COVID-19 symptoms, please stay isolated and seek professional medical guidance as required – do not come to campus!**

Emergencies and Safety Equipment

- In case of an emergency, get to safety, and contact extension 52000 from any university telephone. If you are using your personal mobile phone, dial the central telephone number (519-824-4120) and then ext 52000

when prompted. Tell them what happened and if anyone needs medical assistance.

- **Fire alarms** -located in hallway of second floor
- **Fire extinguishers** located in front of labs in both rooms 219 and 222
- **Dual Eyewash Station and Safety Shower**
 - Located in middle of room 222, and at side door entrance to room 219. For eyewash station, push handles to spray water on the affected area.
 - For shower, pull overhead lever to activate the shower

COVID-19 Sanitization Materials

- 70% ethanol in spray bottle (labeled for surface disinfection) - located in defined areas of both rooms 219 and 222, associated with the general workflow of the labs and at all sinks and entrance to rooms 219 and 222.
 - **Alcohol is flammable and cannot be used near sparks or open flames**
- Paper towels (located by all sinks)
- Hand soap (located by all sinks)
- Hand sanitizer (located at sinks in both 219 and 222)
- **PPE (responsibility of individual research programs)**
 - Nitrile gloves
 - Face shields (if available) or safety glasses
 - Non-N-95 masks (painter's masks; dust masks, non-medical surgical masks)

Mandatory Hygiene Procedures

1. **Face coverings** (i.e., use of a material to cover the nose and mouth, not a valved mask) **will be worn AT ALL TIMES** while working in this research facility and rooms therein, including upon entry and exit to this facility.-
2. Personnel must wash and/or sanitize their hands every time they enter and leave rooms in the Crop Science Genomics lab.
 - a. Please wash hands with soap for the recommended 20-30 second interval in running water
 - b. Hand soap is available at both double sinks.

- c. If hand soap needs to be re-filled, please contact Chris Grainger to provide more.
- 3.** Once your hands are clean, please put on disposable nitrile gloves and wear them at all times.

1) Classification of Crop Science Genomics Lab

The Crop Science Genomics Lab is a shared space between various individual research groups. The specific labs that form the genomics lab are rooms 219 and 222. The following faculty constitute the Genomics Lab user group:

Faculty Member	Program
Dr. Istvan Rajcan	Soybean Breeding and Genetics
Dr. David Wolyn	Asparagus Breeding and Genetics
Dr. Mary Ruth MacDonald	Plant Pathology
Dr. Milad Eskandari	Soybean Breeding and Genetics
Dr. Lewis Lukens	Bioinformatics
Dr. Peter Pauls	Bean Breeding and Genetics
Dr. Helen Booker (Dr.Ali Navabi)	Wheat Breeding and Genetics

2) Nature of Research Activities in Crop Science Genomics Lab

The shared genomics lab is used by researchers to conduct various DNA and RNA related methods. These included (but not limited to): DNA/RNA extraction, PCR/qPCR, Genotyping, DNA sequencing and data analysis.

3) Procedures for Working in Crop Science Genomics Lab

- 3.1)** Access to rooms 219 and 222 will be allowed Monday to Friday from 8:30am to 5pm. Additional hours may be permitted by permission from Chris Grainger for defined pieces of equipment to facilitate shiftwork and social distancing. Please follow University of Guelph policies when working after hours, including working alone g after hours. **3.2) The maximum number of people allowed in 219 and 222 collectively is limited to two people per room at any one time.** Please ensure that 2 m of physical distancing is

adhered to while working in rooms 219 and 222. *N.B.* Benches and equipment for use are marked and are separated by 2 m.

- 3.3)** All persons entering/working in rooms 219 and 222 must wear appropriate protective face coverings (as per provided by their individual labs). Face coverings must be worn AT ALL TIMES.
- 3.5)** Given the nature of the lab a weekly schedule will be prepared and access to the rooms by members of the various research groups will be assigned in an equitable fashion. Request for access are to be made by the end of the day every **Tuesday** of a given week so that the schedule can be drafted and sent out on **Friday** for lab use for the following week.
- It is preferred that PI's set routine weekly schedules for their personnel and that a master schedule can be set to accommodate the various research programs. Individual program schedules as well as "one-off" requests for access are to be sent to Chris Grainger (cgrainge@uoguelph.ca)*
- 3.6)** At all times while working in rooms 219 and 222, users are to practice appropriate COVID-19 safety measures. This includes regular hand washing and or use of hand sanitizer. This also includes sanitizing workspace once work is completed.
- 3.7)** For specific training of genomics methods that require the lab manager to be present, those requests will be accommodated on an appointment basis. Please contact Chris Grainger (cgrainge@uoguelph.ca) to book an appointment for training purposes.

4) Implementation of COVID-19 Related Management of Rooms 219 and 222

- 4.1) Users are to sanitize both workspaces and equipment after work has been completed using 70% ethanol.**

A spray bottle of 70% EtOH is to be kept on all work benches in the lab. Please use the provided bottle to spray all common touch surfaces prior to use and upon completion of your work includes:

- Any equipment used (e.g. PCR machines/DNA/RNA extraction equipment/pipettes/qPCR machines and keyboards/DNA sequencer and keyboard/fridges and freezers)
 - Door pulls and handles
 - Light switches
 - **Basically anything you touch**
- 2) Please also spray a paper towel and then wipe down the spray bottle handle and hand hold upon completion of use

4.2) Any persons not adhering to this SOP will be removed from the room and their supervisor contacted to discuss nature of infringement and appropriate course of action to resume work activities.

4.3) All questions related to this SOP and specific day-to-day work activities can be sent to Chris Grainger (cgrainge@uoguelph.ca)

Trainer_____

Trainee_____

Date_____