

Wolkovich Lab

Research exemption request for critical research

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1 Overview of work

The field crew will be based in Penticton (49.481024, -119.587796). Fieldwork will involve driving to various vineyards within a 30km radius up and down the Okanagan valley. Once on site, crew members will scope out vineyards and plan which vine plants will be selected for phenological monitoring next year. This activity needs to take place this year because our contacts with the vineyards are retiring this year, and so will be unavailable to facilitate project set up next year. We must set up our field sites in early May because later in the year the vineyard employees are busy applying various viticulture practices across the vineyards. The vineyards will therefore be less amenable after May and the risks of coming into contact with vineyard employees will be higher.

2 Reducing field work to critical aspects

Our initial plan was to collect three year's of phenological (vine timing i.e. flowering) monitoring data in the Okanagan Valley vineyards so we can build phenology models to help local vineyards and vineyards globally adapt to climate change. It is essential for our models that we obtain more than one year of phenology data because phenology is very variable between years and is very responsive to climactic differences. However, we recognize that we cannot collect a season of phenology data this year. Instead, we propose establishing field sites and collaborations with vineyards this year so that we can successfully collect data next year and the following year. Establishment of field work this year is critical to any future field work because our key contacts with the vineyards, Pat Bowen and Carl Bogdanoff from AgCanada, are retiring this year.

Without these contacts we do not have the infrastructure to develop potentially long lasting relationships with Okanagan Vineyards. This year's establishment of field sites are therefore potentially highly influential for the long term research output and industry collaboration of Lizzie Wolkovich, the Principle Investigator. It is also crucial that we visit the vineyards in early spring rather than any other time, because this is the window of time where the vineyards are most agreeable to initiating contact with us and allowing us access to their sites. Earlier in the year snow cover can cause problems. Later in the year much of the viticultural practices take place, meaning the vineyard staff must focus on essential maintenance rather than incoming researchers. This year we will thus focus on getting sites set up, and in doing so laying the foundations for a successful collaborative relationship established among the Okanagan vineyards. Data collection will take place next year onwards.

3 Addressing UBC's specific questions

We are following the principles and guidelines laid out by WorkSafe BC specifically for Forestry field work and COVID-19 safety <https://www.worksafebc.com/en/about-us/covid-19-updates/covid-19-industry-information/forestry>

1. Are you able to travel to and from your research sites in compliance with current University and Government Travel Restrictions?

To undertake travel to the research site, we will first ensure that crew members are healthy prior to departure. All three field crew members plus Lizzie's partner Johnathan, will begin Temperature/Symptom Tracking two weeks before the day the field crew are to leave for the field. Temperature screening will be done with a properly calibrated thermometer, with temperature thresholds based on Health Canada guidelines. An indicator for possible COVID-19 infection is 37.5 C. Active daily monitoring will be conducted using the Personal Health Daily Monitoring Form (from the BC Center for Disease Control). All crew members must complete the form which is provided below. Any crew member that has had a confirmed case of COVID-19 or who is unwell at the time of departure based on the COVID-19 symptoms being tracked using the Personal Health Monitoring Form, will not be allowed to take part in this research project.

2. How does the size of your team allow for social distancing?

The crew consists of three active field members plus an additional driver who will not be in the field. This additional driver is Lizzie's partner Johnathan, who will be available to share driving with Lizzie but will not undertake active field duties in vineyards. Other than driving to and from the accommodation, and driving to the field sites, all of the work is outdoors, and there will be no difficulty in maintaining appropriate social distancing of two meter minimum distances. Any team meetings will take place outside to maintain physical distance. All team members will be responsible for ensuring physical distancing is maintained and any special COVID-19 precautions are strictly followed as per WorkSafe BC guidelines. Good hygiene will be practiced at all times, in line with the WorkSafe BC recommendations.

3. How do modes of travel at your research site allow for social distancing?

Lizzie will be in her own vehicle along with her partner Johnathan, while Faith and Mira will share a field vehicle. Lizzie and Johnathan are already isolating as a family unit so do not need to maintain social isolation from each other. In the vehicle shared by Faith and Mira the passenger in the back-passenger seat will be diagonally positioned relative to the driver to maintain a two meter distance ensuring physical distancing is in place as per WorkSafe BC guidelines. All crew will wash hands with soap and water (or with hand sanitizer) prior to entering the vehicles. The interior (e.g. seatbelts, headrests, door handles, steering wheels, and hand holds) and exterior door handles of both vehicles will be wiped down with sanitizing cleaner at the end of each day, or sooner if a member of the crew reports COVID-19 symptoms.

4. How do living and working conditions at the site allow for social distancing and/or for self-isolation should it become necessary?

Faith and Mira will stay in a large apartment near Penticton. They will have separate bedrooms and washrooms, and will sanitise communal space and equipment regularly and remain 2 meters apart at all times. Lizzie and Johnathan will stay in a separate apartment close by, but will not need to maintain social distance as they are already isolating as a family unit. **Each crew member will have their own sanitizer and hygiene supplies for personal use for the duration of the field work. There will also be bulk liquid soap, water, and sanitizer that the crew can use to fill their personal containers if the need arises.**

5. What are the plans in place should a member of the research team develop COVID-19 symptoms?

If a crew member exhibits COVID-19 symptoms (e.g. sore throat, fever, sneezing or coughing) they would be put into the far back seat of their truck, and instructed to put on a protective face mask and gloves. The other crew member, if not already the driver, would become the driver and they would put on a protective face mask and gloves. The inside of the vehicle (e.g. seatbelts, headrests, door handles, steering wheels, and hand holds) would then be wiped down with sanitizing cleaner. The vehicle would immediately head back to Vancouver not stopping along the way (**there is extra gas in Gerry cans in the truck bed, and food/water**). The drive time would be up to but likely not more than 6 hours. During the drive, the person with symptoms would continue to monitor their situation using a thermometer and tracking other health metrics (see Personal Health Daily Monitoring Form below). The field crew have thermometers in the vehicles to enable effective monitoring. The vehicle interior and exterior door handles would be wiped down with sanitizing cleaner upon completion of the drive. Following the protocols set out by WorkSafe BC, both the person with symptoms and the driver would go into self-isolation in their homes for two weeks. The research supervisor would immediately notify the Public Health Authority in British Columbia by dialing 811 that someone with symptoms is self-isolating. We would notify the management of our field accommodation so that they could take necessary cleaning precautions. Any crew that has had a confirmed case of COVID-19 will not be allowed to come to work.

6. If your research will bring you into contact with local communities, how will you ensure required and effective social distancing protocols?

The field crew will need some interaction with local collaborators, but will maintain social distance from them as per the WorkSafe BC recommendations. To this end, all meetings will be kept to a minimum, and will take place outside where there is enough space for 2 meters between every person. The field crew will also practice good hygiene, including wearing face masks, not touching faces, washing hands often and for at least 20 seconds (or sanitizing hands if washing not possible) and sneezing/coughing into disposable tissues if needed.

To avoid contact with vineyard field workers, we have the following plan in place. The field crew will alert vineyards to our presence on site so the field crew and vineyard field workers will be aware of each other's presence. Our fieldwork does not require interaction with such workers, so if the field crew see any workers they will retreat to a safe distance until they have left the immediate area. Any surfaces the field crew and vineyard fieldworkers might come into contact with will be sanitized before and after contact. Our crew members will also maintain a 2 meter distance from each other at all times as per the WorkSafe BC guidelines.

The field base will be close to the town of Penticton, where the field crew will obtain necessary groceries and gas. To reduce risk to local communities, shopping trips will be kept to a minimum (once a week), wear face masks, and sanitize our hands before and after shopping, and maintain good hygiene. The field crew will only use self-service gas stations and prior to use we will wipe down the gas pump nozzle and PIN pad on the pump with sanitizing wipes. The field crew will not come into contact with any First Nation communities in the Okenagan Valley.