

Plan for In-person Research – Maly Lab

Consult Office of Research Checklist for Developing a Return to In-person Research Plan for help with filling the template

Locations covered (list building and room numbers): CHB 422, CHB 424, CHB 424A, 428A, BAG 452, BAG 440

COVID-19 Supervisor

Name: Prof. Dustin J. Maly

Contact Info: 206-601-9696

A member of the group that can assume the COVID-19 Supervisor role in the PI's absence:

Name: Zack Potter

Contact Info: 707-227-0496

Names of people conducting in-person research:



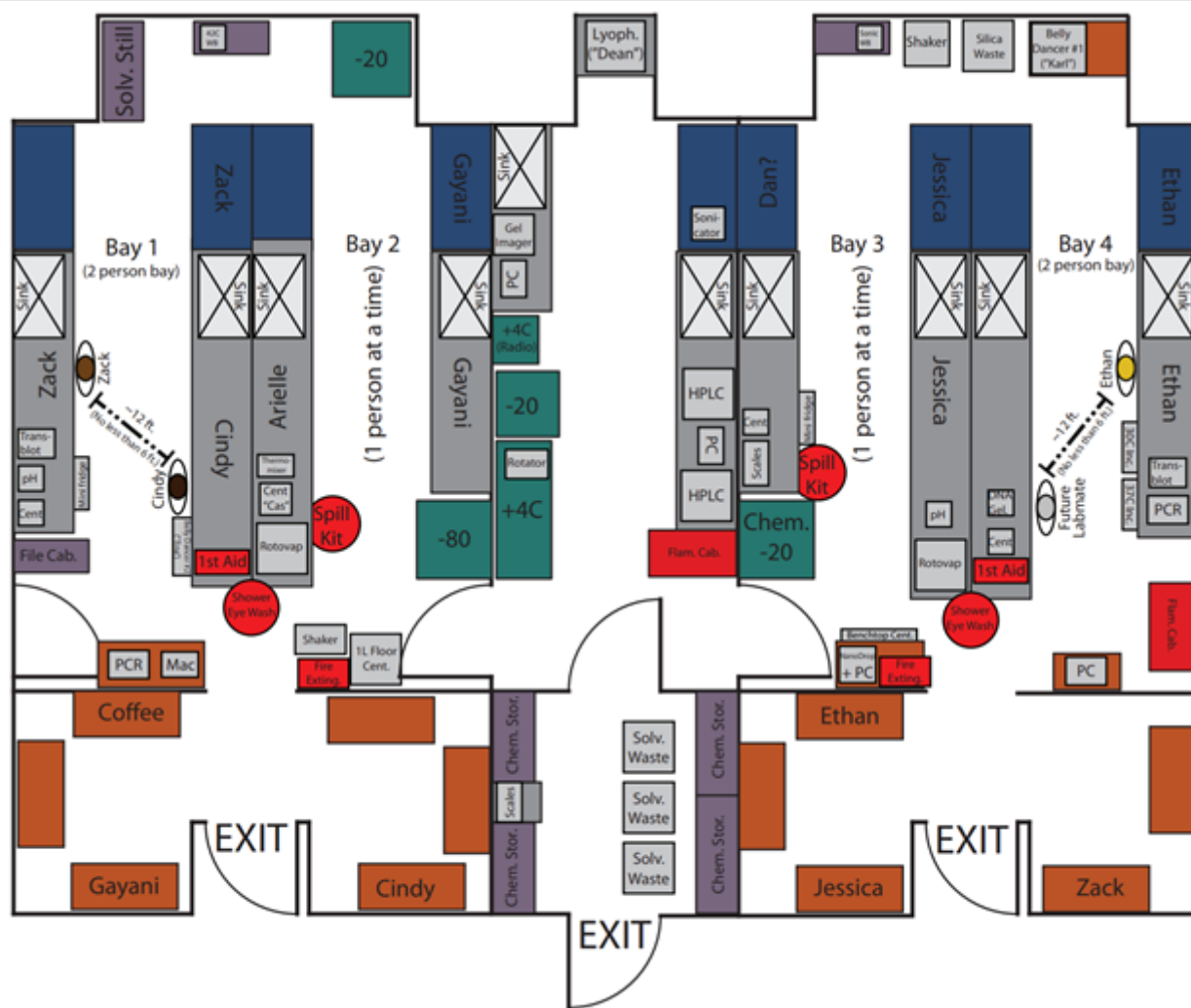
Summary

- Restarting research is completely voluntary.** There is a lot of home-based research that can be conducted including writing papers/reviews and reading the literature. However, keep in mind that **there is no certainty as to when research will return to the old normal** and how long the wait will be. The goal is for the lab to slowly resume research activities while maintaining the health of all its members and community. We would like to set up best practices that are (1) **comfortable to follow during research**, (2) **easily adhered to** so that they become second nature when working in the lab. **It is important to emphasize that no one is required to go into work if they are not comfortable. Please use your own judgement on whether it is safe for you to work on-campus at any given time.**
- Attestation on UW Workday is required** for every day that you choose to come to the lab. If you have previously come to lab and are now feeling that you have symptoms of COVID19, you must report this immediately by following the instructions on the daily attestation (<https://isc.uw.edu/>). This will 1) allow you to be tested for the virus and 2) set contact tracing in motion so that your lab mates are informed and kept protected.
- If you feel sick or exhibit any combination of the current list of COVID19 symptoms, stay home.
- If you test positive for COVID-19 and have been in the lab, you must notify the EH&S Employee Health Center (emphlth@uw.edu, 206-685-1026) immediately so that they can begin deep disinfection of any areas you worked in and notify anyone who may have come in contact with you or with those areas. In addition, you can also inform Dustin Maly (djmaly@uw.edu) and Paul Miller (paulmil@uw.edu) if you are comfortable doing so. Contacting Dustin and Paul is total voluntary and not required.
- The **Maly Lab Google Calendar** and the **TC Room** Google calendar will be used to document who is in the lab on any day, at any time, and must be filled out on Saturday for the week ahead. Time changes after Saturday should be immediately communicated to everyone using the lab email list and Slack workspace. For your scheduled times, you should make a plan in advance and stop at a predetermined stopping point.
- These lab-specific requirements are in addition to:
 - EH&S's University Requirements for COVID-19 Prevention in the Workplace. You can find this document at: <https://www.ehs.washington.edu/covid-19-health-and-safety-resources>.
 - Chemistry department COVID space policies (copy available on lab google drive [here](#)). This document details the policies for common areas and shared equipment rooms in Bagley, CHB, and CHL.

Social and Physical Distancing

1. Attach lab floor plan. Label all the room(s)/work area(s) and for each room/work area indicate the maximum occupancy:

Three people per lab (one person per one-person bay, up to two people in two-person bays) and one temporary/passing by person if necessary. NOTE: Maximum persons per bay is not to exceed two (including temporary/passing by persons). There are two, two-person bays in the lab, Bay 1 (located in CHB 422) and Bay 4 (located in CHB 428). Please see floorplan below for more details.



2. Describe a lab usage scheduling plan that will minimize the number of people in the lab at any given time and how it will be implemented:

- A shared google calendar will be used to sign up for each bay every day. Any work that can be done using computers should be done at home and workspace should be signed up by people who need to use bench space, at least by the preceding Saturday (If you previously signed up for bench time on the calendar, but no longer need your scheduled time, communicate with the lab so others may utilize the lab space).
- Continuous attention needs to be given to the workspace/instrument scheduling calendar. Sudden change of plans should be minimized and must be properly communicated as necessary to maintain proper social and physical distancing at all times. (Lab/equipment calendars will be integrated into slack to get notifications when changes happen)
- Each office can be occupied by 1 person at a time and the other person signed up for the workspace in that lab should remain in the lab space while the other person might be in the office. This needs to be properly communicated between the two people signed up for each lab based on their requirements.
- All proteomics experiments need to be done at your own bench. Micro/mini centrifuges located on your own bay need to be used. Stage tips should be made at your own bench that is cleaned with 70% EtOH to remove any dirt and dust and stage tip prepping items should be then returned to the appropriate drawer in CHB424A.
- Tissue culture lab and adjacent storeroom can be only occupied by one person at a time. TC time should be signed up using the google calendar as before. All TC hygienic practices should be continued while maintaining the new social and

physical distancing practices. At least a 5-10 min slot should be signed up for taking media etc out for thawing and should not overlap with someone else's TC time.

- Attention should be made to ensure that nobody is inside the TC storeroom before entering it (knock and look for lights being turned on). Computer in the TC storeroom should be only accessed through remote control using Teamviewer or CloudBerry (unless there is an exception which should be communicated to other group members through the Maly lab common email or slack channel).

3. Describe specific rules and policies that will be implemented in your group to ensure social and physical distancing measures:

- The one person per one-person bay (Bays 2 and 3) and up to two persons per two-person bay (Bays 1 and 4) rule needs to be maintained as previously explained. One person in the TC lab and CHB424A at a time.
- If an instrument in a bay that is occupied by a person needs to be temporary utilized by another person, the 6 feet distance need to be maintained and all such commonly shared instruments/equipment (such as balances, pH meter, rotovaps, gel boxes, western blot equipment) will be placed at the beginning of the bench when possible (towards the lab entrance side). If -20C fridge, solvent still, 40C water bath, high vac (in CHB 422A) or sonicator (in CHB 428A) need to be used, verbal announcements should be made to the person working in the bay (to request and for approval). Remember, there can only be a maximum of two persons per bay.
- If the microwave or flash systems need to be used by someone, about 10 min set up/finish up time need to be discussed with the person that is signed up for that bay on the given day and 6-feet distance need to be maintained at all times. These instruments can be used only by one person at a time. Simultaneous use of analytical and prep HPLCs can only be done by one person during the same time.
- Do not wear headphones/earbuds in both ears while in the lab. You must be able to hear anyone trying to get your attention.
- Stockroom pickups
 - A person working in the evening will collect any received packages from the stockroom every day. People should message the lab-ordering slack if they received a package so the person picking up can make sure they got everything.
 - Person who picked up the package should store the package according to the temperature specifications and note down the received items in the "Maly Lab Orders" spreadsheet, indicating where each item is stored.
 - There will be designated areas in the 4C fridge, -20 freezer and at room temperature to keep the items collected from the stockroom.

4. Describe the tasks and activities that can be safely performed in the lab:

- All standard experiments and procedures can be performed in the lab, if required social and physical distancing requirements (6 ft apart) can be met.
- Tasks that can be performed at home must be performed at home. Whenever possible, planning experiments, analyzing data, writing lab notebook notes, and similar activities should be done at home.

5. Describe the changes to the workspace(s) that have been made to ensure social and physical distancing and hygiene requirements:

- All workplaces and equipment usage will be according to the signed-up schedules to minimize overlap.
- The use of a keyboard and a mouse with the shared computer used to operate HPLC and lab computers has been eliminated and replaced by remote desktop access from individual computers.
 - All lab computers used for software and data processing purposes should be accessed using remote control (team viewer or cloudberry).
 - Each morning, the first person using the lab computer for any quick purpose (such as instrument reservation, checking of google calendars, quick google searches etc) will put a new saran wrap on the keyboard and the mouse. Last person leaving the lab who is signed up for its workspace will remove the old saran wraps from keyboards and mouse and wipe all surfaces with 70% EtOH.
 - For HPLC computer, each person who uses it should put a new saran wrap at the beginning and remove it at the end of the signed-up time. Then wipe with 70% EtOH.
- Only one person should be near the analytical or the top pan balance placed in CHB 428A. An additional analytical and top hand balance will be located in the CHB 424 lab store room for additional usage.

- One rotovap will be placed in CHB 422A and the other will be placed in CHB 428A. Collection flasks need to be emptied after each usage even if the rotovated amount is less than 10 mL. If larger volumes are rotovaped, those can be directly added to the waste carboys kept inside CHB 424. Smaller volumes should be added to your waste container in the hood in order to minimize the handling of common large waste carboys.
- Fabric covered chairs cannot be disinfected and should not be shared. Those chairs should be labeled with the name of the person using it during the safe start period. If metal or wooden stools are used, those should be disinfected with 70% EtOH before and after each period of usage.
- Each bay should have its own gel box, power supply and microcentrifuge.
- Everyone should have a complete set of pipettes as well as tip boxes for themselves. If pipettes need to be used near an instrument that is away from your bench, please take your own pipettes to the required place. Do not share pipettes among two or more people. Please wipe these down at the beginning and end of day.
- Multichannel pipettes need to be shared with caution as they will be shared between lab members during the same periods of time. All multichannel pipettes need to be wiped thoroughly with 70% EtOH before and after usage and should be returned to their drawer in CHB 424A immediately after usage. If two people need to share them between the same period of time, verbal agreement needs to be made and pipettes should be carefully exchanged.
- If a bay is occupied by the maximum two persons and you need to get to a piece of equipment or a cabinet/drawer in that bay, please coordinate with each other and take turns. Be prepared to wait a little longer than usual to use equipment or grab an item. Try to plan ahead and minimize trips.
- To safely access shared lab stocks such as gel-making reagents, cell stocks, ladders, common buffer solutions, etc., make sure to wear a clean pair of gloves and spray and disinfect gloves with 70 % EtOH before and after accessing the reagent. You should also spray the reagent container down with 70% EtOH as well.
- Use clean gloves whenever using the 4C fridge in CHB 424A. Make sure to disinfect all practically possible items that go in and come out of the fridge with 70% EtOH. Do not lean inside the fridge at any instance and make sure to wear lab coats if need to reach something deeper in the shelves (to avoid skin contact).
- When full, keep your trashcan near the front door to be picked up. Bring back the same bin to your bay (label your trash can with your name if necessary).
- TC lab will have assigned rotations for inventory, autoclave, trash. Each person will restock the shelves after each use, and refill EtOH every two empty bottles
 - TC rotation must be done between Friday 8am and Monday 8am. Please schedule in TC calendar when this will be done. This will make sure things are done in a timely manner, minimize the number of sessions it takes to do all items on checklist, and minimize contact with others when going in and out of the TC room
- The TC storage closet should be used as temporary desk space for the person working in TC. But this space should only be used during long incubation times or waiting for media to warm up
- 5-15min slots should also be signed up for people simply checking on cells
- LN2 and CO2 levels should be checked similar to prior protocol and updated on the calendar after your session. Please refill LN2 when it drops to 2 bars and notify Zack when CO2 drops below 200
- TC lab occupancy is limited to a single person at any given time (scheduling must be done through Google calendar, as always)

6. Describe how policies and measures have been communicated to group members (signage posted, e-mails, group meetings, etc):

Content of this document has been thoroughly discussed among all the group members. All group members doing research in person have signed a copy of this document, which is a part of the group safety manual. Signs reminding group members to wash hands regularly is posted at the entrance.

7. Describe how new members of your group will be trained. Please specify any training that can and should be done remotely, such as training for specific instruments, equipment, or software.

- Whenever possible, training in common experimental techniques will be performed through video recordings and live video conferences.
 - A library of training videos available online (on sites like Youtube) for general laboratory techniques (cloning, PCR, electrophoresis, Gibson assembly, tissue culture, proteomics data processing, etc) will be made available to incoming students.
 - If videos are not available online, senior students will record an instructional video. These will be recorded by the senior student alone, through desk-mounted video recording tools (like smartphones) or a head-held camera (GoPro) that will be treated as a group resource/instrument, available to everybody in the group through

cloud storage (google drive). Alternatively, the incoming student will observe the demonstration in real time through a virtual meeting.

- Techniques that must involve a Maly lab specific demonstration from a senior student:
 - Tissue culture room use and sterile technique
- Training for lab instruments (lyophilizer, HPLC, Flash column) will be done remotely through pre-recorded training videos and/or live virtual meetings.
- Even after online training sessions, a more specific in-person training will be necessary at times. These training sessions will be performed observing Covid guidelines provided by the university: Both the trainer and trainee will be required to maintain at least 6 feet apart, and must wear procedure masks, eye protection, and gloves while working together in-person. Procedure masks are the disposable kind used by medical doctors (also called “medical face masks”).
- Before performing new experiments independently, new group members must discuss a detailed plan and a risk assessment with a senior student in a virtual meeting.
- When doing experiments, there will always be a senior researcher present in the nearby lab or office space.
- In case of emergency, the second researcher will approach wearing standard PPE equipment, including face mask.
- Trainees will not perform highly hazardous experiments that would normally necessitate the presence of a second researcher in the immediate vicinity. The hazardous part of such experiments will be performed by a senior researcher instead.
- Interpretation of the experimental results and troubleshooting will be performed online with the help of senior students and/or the PI whenever possible.

Responding to Illness

1. Describe how the University of Washington requirements for symptom assessment and attestation will be fulfilled:
 - Before starting coming to the lab every member of the group must login to Workday <https://isc.uw.edu/> and **sign-off that they are healthy.**
 - Here is the list of symptoms that UW instructs us to look for:
 - [COVID-19 Symptom Attestation for Working On-Site](#)
 - **Since your last day of work, or since your last visit to a University facility, have you experienced any of the following symptoms:**
 - A new **fever** (100.4 F or higher) or a sense of having a fever?
 - A new **cough** that you cannot attribute to another health condition?
 - New **shortness of breath** that you cannot attribute to another health condition?
 - A new **sore throat** that you cannot attribute to another health condition?
 - New **muscle aches** that you cannot attribute to another health condition or that may have been caused by a specific activity, such as physical exercise?
 - New **respiratory symptoms**, such as sore throat, runny nose/nasal congestion or sneezing, that you cannot attribute to another health condition?
 - New **chills or repeated shaking with chills** that you cannot attribute to another health condition?
 - New **loss of taste or smell** that you cannot attribute to another health condition?
2. Describe the plan in case someone in the group develops COVID-19 symptoms (the plan should be consistent with the university recommendations found at <https://www.washington.edu/coronavirus/faq/>):
 - If at work, they must immediately go home and contact their healthcare provider. If at home, they are instructed to contact their health provider. They are instructed to consult <https://www.washington.edu/coronavirus/faq/> for the course of action recommended by the University of Washington in the case of the suspected case of COVID-19.
 - In case a group member tests positive for COVID-19 or their healthcare provider suspects a case of COVID-19, they are instructed to immediately contact EH&S Employee Health Center at 206-685-1026 or emphlth@uw.edu.
 - It is also suggested that members of the group contact Dustin Maly (djmaly@uw.edu, 206-601-9696) and/or Paul Miller (paulmil@uw.edu (206) 543-1612) if they feel comfortable sharing this information.

Cleaning and Disinfecting Your Workplace

1. Describe cleaning and disinfection protocols for high-touch surfaces, shared equipment, and common areas in the lab, including who is responsible:
 - Follow all the hygienic instructions given under different sections of this document thoroughly.
 - At the beginning and the end of every workday in the lab, each person must wipe off their bench, hood sash, and desk using 70% ethanol or IPA solution.
 - Each person should have a 70% EtOH bottle in their bench area, labeled with their names for personal usage.
 - Small 70% EtOH bottles will be kept near microwave, gel/western areas, solvent still, HPLCs, balances, nanodrop, flash system and near lab computers for disinfecting the area before and after each use. These bottles are not to be moved to any other location and should be refilled to top each Thursday morning by anyone signed up for each lab.
 - Any common item or surface in the office area, including door knobs, fridge handle, microwave, and light switches must be wiped off with 70% ethanol or IPA solution before and after each use.
 - Consumption of food during your stay in the lab should be avoided as much as possible or minimized.
 - Food items stored in the food fridge must be in a secondary container (such as a zip-lock bag or tupperware), that can be wiped down with ethanol before inserting into the fridge. (No Aluminum-foil as it has too many creases.)
 - Bottles and cans should also be wiped down.
 - Paper towels and a 70% EtOH spray bottle will be available near the food fridge and coffee table as well.
 - Avoid using lab phones as much as possible and if need to use those, disinfect thoroughly with 70% EtOH before and after use.

Encouraging Good Hygiene

1. Describe measures in your group that will promote and enable uniformly good hygiene practices:
 - Every time a person enters or leaves the lab, they should wash their hands with soap and water. Signs reminding people to wash their hands are placed at the lab entrance
 - Every time a person takes their gloves off, they should wash their hands.
 - Every group member has been provided with a hand sanitizer bottle for personal use and they are strongly encouraged to carry it while at work.
 - Each person should have their own glove boxes, wipe boxes and tissues. Avoid using these items from other peoples benches and maintain at least one extra box of each as a backup (make sure not to run out of stocks). Maintain proper stocks of these items as well as 70% EtOH in the lab.
2. Describe the lab policy for wearing a mask and other protective equipment:
 - Wearing of a mask is discouraged while working with pyrophoric and flammable materials in the hood and in TC. In all other situations, the group members are requested to wear a mask.
 - Before putting a mask on, taking it off, or adjusting it, take the gloves off and wash your hands with soap and water.
 - When taking a mask off, do not touch the front of the mask.
 - If using a reusable cloth mask, the mask must not be reused until after it has been laundered. Treat it as contaminated until then.
 - PPE required for the work in the group's lab space (lab coat and glasses) is mandatory. Lab coats and glasses should be labeled with the name and should not be shared at any instance.
 - Policy on wearing gloves in the lab:
 - While working in the lab everyone must wear gloves.
 - Do not touch your face, hair, phones, headphones, computers, or other private items while wearing gloves.
 - Gloves should be changed anytime they become contaminated or at the end of a specific operation (for example setting up an experiment). Gloves should be disposed in your personal trash box and once taken off the hands, used gloves should not be left anywhere else including the personal bench area.
 - All shared equipment (solvent still, balances, pH meter, gel/western blot equipment, microwaves, rotovaps, fridges, freezers, high vac, ovens, flash system, HPLCs, lyophilizer, water baths, sonicators, shakers, incubators, PCR machines, thermomixer, centrifuges) should be used only while wearing gloves.

- All shared chemicals and reagents should be handled with gloves.
- Every time a person takes their gloves off, they should wash their hands with soap.
- You should place used gloves in your own trash box.
- The use of gloves is not allowed in the office space or elsewhere outside of the lab unless specified by the departmental policies.

General

1. Provide a plan for training group members in COVID-19-related policies and procedures described in this document, including how the training will be documented:

All group members participated in determining the group policies related to COVID-19. Group policies have been discussed and reviewed at the zoom group meeting on (05/13/2020, 05/20/2020, 05/22/2020, 05/28/2020). All group members have been provided with a digital copy of the policy and a digitally signed copy of the policy is available online. *All group members will be required to certify that they have read, understood, and intend to comply with both the described lab policy AND the departmental policy. The certification will be recorded with our other safety documentation and a copy will be filed with the department.*

2. Describe the plan for visitors. The plan should address symptom monitoring, attestation, and visitor log maintenance for all the visitors. (Visitors are defined as those who do not normally use these spaces, including both UW and non-UW personnel):

- All visitors must contact a member of a Maly group and organize a handoff of chemicals, solvents, or small instruments.
- All visitors must contact a lab member to schedule a visit in case they need to use an instrument located in our lab. Prior to the visit, visitor will receive and acknowledge the receipt of this policy. Time for all visit and visitor's contact information will be saved in an online log (part of the group calendar).
- Any visitor interested in using an instrument located in the Maly lab should schedule instrument time at least one day prior to the anticipated time of usage. Requests for instrument usage should be sent to maly-lab@uw.edu in the following format: [Name/Lab/Instrument/Day and time span for usage] and an acknowledgement/approval of the request would be a reply email from a Maly lab member who will then grant them access to the calendar for the approved instrument.
- Requests for chemicals and solvents should also be sent to maly-lab@uw.edu and the requests should be sent using the following format: [Name/Lab/chemical or solvent/amount required]. Once the visitor receives a reply email that the requested chemical/solvent is ready, it can be collected from CHB424. The requested chemical/solvent will be placed in a bin inside the cupboard to your right as you enter CHB424 and the container will have the name of the requester.
- Visitors should always follow the Maly lab 'safe start' protocols as explained in this document when occupying the Maly lab space.
- All non-UW visitors are required to fill out and sign the Department of Chemistry Visitor COVID-19 Symptom Attestation for Working On-Site and attest that they do not have any of the following symptoms on the date of their visit.

Since your last day of work, or since your last visit to a University facility, have you experienced any of the following symptoms:

- A new fever (100.4 F or higher) or a sense of having a fever?
- A new cough that you cannot attribute to another health condition?
- New shortness of breath that you cannot attribute to another health condition?
- A new sore throat that you cannot attribute to another health condition?
- New muscle aches that you cannot attribute to another health condition or that may have been caused by specific activity, such as physical exercise?
- New respiratory symptoms, such as sore throat, runny nose/nasal congestion or sneezing, that you cannot attribute to another health condition?
- New chills or repeated shaking with chills that you cannot attribute to another health condition?
- New loss of taste or smell that you cannot attribute to another health condition?

If you are sick or have one or more of the above symptoms:

- You must stay home or leave the UW facility at which you are working.
- Follow your department's procedure for calling out sick or requesting to work from home.
- Contact your health care provider for medical guidance.

3. Describe how group members will be informed of COVID-19-related policies for shared facilities and common spaces in the department:

All group members will be provided with a digital copy of any guidelines developed by the department. The group members must acknowledge the receipt of the copy by email.

4. Describe any other COVID-19 related policies implemented in your group:

If any lab member who initially took precautions not to come to the lab due to rising of any suspicious symptoms further develop more severe conditions related to COVID-19, he/she should immediately notify the supervisor and undergo appropriate testing and recovery protocols directed by medical professionals.