Plan for In-person Research - Rathod Lab

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


COVID-19 Supervisor

Name: Dr. Pradip Rathod  Contact Info: rathod@uw.edu

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

Name: ..............................................................

Names of people conducting in-person research:

Social and Physical Distancing

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

<table>
<thead>
<tr>
<th>Rathod Lab 1st Floor Suite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bagley Hall Rooms 192D-H, 192J, 192L-M, 192P-W will have a total of 6 lab members present at any given time.</td>
</tr>
<tr>
<td>Bagley 192G, 192J, and 192Q have a maximum occupancy of 2 lab members.</td>
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<tr>
<td>All other rooms are single-occupancy.</td>
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<tr>
<td>BAG 192D L/R: radiation bay</td>
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<tr>
<td>BAG 192E L/R: bench space</td>
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<tr>
<td>BAG 192F L/R: nanodrop and plate reader</td>
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<tr>
<td>BAG 192G: communal office suite</td>
</tr>
<tr>
<td>BAG 192H: private office</td>
</tr>
<tr>
<td>BAG 192J: communal office suite</td>
</tr>
<tr>
<td>BAG 192L: private office</td>
</tr>
<tr>
<td>BAG 192M: darkroom</td>
</tr>
<tr>
<td>BAG 192P: centrifuges and HPLC</td>
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<tr>
<td>BAG 192Q: BioPlex instrument</td>
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<tr>
<td>BAG 192R: cold room</td>
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<tr>
<td>BAG 192S: incubators and biosafety cabinet</td>
</tr>
<tr>
<td>BAG 192T: wheat germ preparation area</td>
</tr>
<tr>
<td>BAG 192U: autodrive</td>
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<tr>
<td>BAG 192W: radiation closet</td>
</tr>
</tbody>
</table>
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. 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. Therefore, learning how to practice good personal and social protection, while continuing to drive your projects and to advance science is going to be important for the road to recovery and for your contribution to human health.

b. Entry into the lab and starting research activities is contingent on having a research plan for each day with specific experiments to be conducted. Key information includes estimated time to be spent in the lab, spaces that will be occupied, and shared equipment that will be utilized.

c. The Rathod Lab Google Calendar will be used to document who is in the lab on any day, at any time, and must be filled out on Sunday for the week ahead. Time changes after Sundays should be avoided, and if necessary, lab members or affected parties must be notified immediately via email.

d. Each two-hooded bay is designated as a single-occupancy workspace. To implement this policy use of the Rathod Lab Google Calendar and shared equipment Google Calendars will be required. The lab space allows 6 individuals to be 15+ ft away from each other at all times. In an effort to minimize maximum occupation of 6 individuals the staggering of working hours is strongly suggested, but no formal shift policy will be employed. To avoid close proximity in shared spaces or with shared equipment all researchers will be required to sign-up with the appropriate Google Calendar.

e. Give yourself enough time to complete your experiments plus time for cleaning and sanitation of used areas. If running overtime cannot be avoided the affected parties must be notified immediately via email.

f. Bagley 192 utilizes a single door for entry and exit. Only one researcher at a time should approach the door looking and listening for others entering or exiting the lab.

g. Bagley 344, 346, and 362 each utilize a single door for entry and exit. Only one researcher will be permitted to do lab work on the 3rd floor Rathod suite at any given time.
h. Bagley 342 is a supply room with a single door for entry and exit. Before entering the room, an individual must announce his or her presence by knocking.

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

   a. As specified in 2, every bay (space with two hoods and two benches) is designated as a single-occupancy space.

   b. Even though there are multiple workbenches and biological safety cabinets the entire 3rd floor Rathod suite (Bagley 342, 344, 346, and 362) is designated as a single-occupancy space.

   c. Before entering a lab or office space, you must verbally announce your entry. Wait for any occupants to respond to you. If the room is already at capacity, you must wait until someone else leaves before you enter the room. Coordinate with the people inside.

   d. Utilize empty desks as necessary to give appropriate spacing but you must clean down desks before and after use with 70% EtOH. You must also use your own desk chair since cloth fabric chairs are not easily disinfected.

   e. Small spaces, such as the autoclave, have a maximum capacity of 1 person and no people will be allowed to pass through except in emergencies (e.g. fire and/or injury).

   f. To coordinate the use of shared spaces and equipment Google calendars for the following have been made: plasmid preparation bay, pH and gel bench, radiation bay, gel imager, plate reader, centrifuges, HPLC, cold room, dark room, autoclave, shakers, flow cytometer, rotavap, hydrogen gas reduction shaker, and biosafety cabinets. Frequently update and check the shared equipment Google Calendars to avoid overlap of space and instrument use.

   g. Prior to the re-opening of research space, it is highly recommended that individuals avoid the sharing of small equipment that can be redistributed or purchased and kept at one’s own bench. Examples of such equipment include microcentrifuges, pipettes, water baths, heat blocks, etc.

   h. Foot traffic around points of constriction such as the autoclave room doorways or backroom doorways will be managed with ENTER and EXIT signs and tape on the floor.

   i. Avoid taking the elevator as much as possible. The elevator should only be used when taking cardboard boxes and biohazard waste to the dumpster or instruments for repair.

   j. Do not wear headphones/earbuds in both ears while in the lab. You must be able to hear anyone trying to get your attention.

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

   a. All standard experiments and procedures can be performed in the lab if social and physical distancing requirements (6 ft apart) can be met. Masks are not a substitute for maintaining this distance.

   b. 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:

   a. Virtual signup procedures have replaced all physical procedures for equipment signup.

   b. A fresh pair of gloved hands will be sterilized with 70% EtOH prior to using lab instrument keyboards and mice. Do not touch any keyboard or mouse with bare hands or used lab gloves. Fresh gloves will be provided next to each computer station.
c. Cloth-chairs cannot be easily disinfected and must not be shared. Vinyl, wood, and metal stools should be placed at common stations. Everyone should only use and touch their own office chairs. Chairs are to be pushed under desks and tables when not in use to keep aisles clear from obstruction.

d. Food items stored in the office fridge must be wrapped in secondary containment such as zip-lock bags 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. 70% EtOH will be placed on top of the microwave for this purpose. The use of personal lunchboxes is encouraged.

e. Every person will keep a recycling and compost bin at their workspace and utilize the garbage bin at their bay. Each person is responsible for bringing their waste to the loading dock waste bins or to the entrance of Bagley 192, 342, 344, 346, and 362 warm zones.

f. Hands must be washed before using the water cooler. Care must be taken to not touch the waterspout and drink receptacle.

g. All non-disposable PPE/chairs must be labeled with users’ names (non-disposable goggles should not be shared among group members).

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

   a. This document has been shared with all 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.

   b. Reminders to wash hands will be posted above each sink.

   c. Reminders to remain 6 ft apart will be posted throughout the lab space.

   d. Signs on the walls and tape of the floor to direct foot traffic will be distributed in appropriate locations.

   e. Signs in the office suite directing appropriate food handling.

Responding to Illness

1. Describe how the University of Washington requirements for symptom assessment and attestation will be fulfilled:

   a. Before returning to on-site research, every member of the group must complete an EH&S training. It can be found here: https://www.ehs.washington.edu/training/covid-19-safety-training-back-workplace

   b. Before coming to the lab each day, every member of the group must log in to Workday https://isc.uw.edu/ and sign-off that they are healthy.

   c. Below is the list of symptoms that UW instructs us to look for as of May 27, 2020:

      i. A new fever (100.4 F or higher) or a sense of having a fever?

      ii. A new cough that you cannot attribute to another health condition?

      iii. New shortness of breath that you cannot attribute to another health condition?

      iv. A new sore throat that you cannot attribute to another health condition?

      v. 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?
vi. New respiratory symptoms, such as sore throat, runny nose/nasal congestion or sneezing, that you cannot attribute to another health condition?

vii. New chills or repeated shaking with chills that you cannot attribute to another health condition?

viii. 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:

a. Since more and more is being learned about COVID-19 as the present pandemic progresses, group members should check for and be cognoscente of a broad range of otherwise unexplained symptoms, including those not currently listed on the UW, CDC and WHO websites. Group members and those accessing Bagley 192, 342, 344, 346, and 362 should air on the side of exercising an overabundance of caution when deciding whether to come to the lab. If an individual is experiencing any symptoms that cannot be explained by another condition, they should not come to the lab.

i. https://www.who.int/health-topics/coronavirus#tab=tab_3


b. If a group member develops symptoms at work, they must immediately go home. They should not enter common areas, as much as possible, and should wear a mask and gloves during their commute home. If the group member experiencing symptoms commuted via public transportation to work that day, the Rathod Lab will reimburse their ride home in a single-occupancy vehicle (i.e. Lyft, taxi, etc.). If at home, they are instructed to contact their health provider.

c. In case a group member or individual who has accessed Bagley 192, 342, 344, 346, and 362 in the last 14 days has symptoms and suspects that they may have COVID-19, they are instructed to immediately contact Pradip Rathod (rathod@uw.edu, 206-384-9404). If Pradip is not available, Laura Chery (lauraarn@uw.edu, 206-321-2409) and/or John White (jwhite3@uw.edu, 206-612-2116) should be contacted immediately.

d. In case a group member or any individual who has accessed Bagley 192, 342, 344, 346, and 362 in the last 14 days is advised by their health provider that they have a suspected case of COVID-19 or tests positive for COVID-19, they are asked to immediately contact Pradip Rathod (rathod@uw.edu, 206-384-9404) and Paul Miller (paulmil@uw.edu, 206-543-1612), and they MUST immediately contact EH&S Employee Health Center (206-685-1026, covidehc@uw.edu)

i. Reporting will enable EH&S to uphold their public health responsibility to follow up with people who may be at risk.

ii. EH&S can help facilitate COVID-19 testing for UW employees.

iii. University units and personnel are required to report suspected or confirmed cases of COVID-19 to a University Employee Health Center.


f. It is recommended that group members and those accessing Bagley 192, 342, 344, 346, and 362 inform all group members of any illness or symptoms amongst members of their household or close contacts. Group members agree to keep any shared information regarding the health of group members and their contacts confidential. An email to the group that includes the facts (i.e. someone in the household or close contact has X, Y, Z symptoms OR suspected OR confirmed COVID-19, starting on DATE through DATE, if applicable) is recommended. It is further recommended that group members with household members or close contacts exhibiting symptoms, suspected or confirmed COVID-19 stay home from the lab for a few days to monitor themselves.
g. Digital thermometers and pulse oximeters will be made available in the lab for use by any group member. They should be sanitized appropriately following use.

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:

   a. Disinfecting Equipment To Be Made Available:

      i. Each lab member will have an individual spray bottle with either +70% ethanol or isopropanol.

         1. Use caution when cleaning surfaces and labels with alcohol solutions. Alcohol can wash marker labels and dissolve some materials.

      ii. A 10% bleach solution may also be provided as an alternative cleaning solution.

      iii. Paper towels for cleaning surfaces will be stocked.

      iv. Lab members will be provided with gloves for use in cleaning.

      v. Other supplies to be stocked as needed or directed (Noah/Sreekanth can prepare bottles/IPA etc. if needed).

      vi. Disinfectant bottles will be labeled with users’ names.

   b. End of Day, Individual Obligations:

      i. At the beginning and end of each day, lab members will wipe their bench, hood sash, and desk with provided disinfectant.

         1. An appropriate cleaning solution will be used for delicate surfaces. +70% alcohol solution to be used as a default cleaner.

      ii. Waste from the day will be completely disposed of in ways that other individuals will not have to touch it.

         1. Trash should not have to be handled in the disposal of bin contents (tucked in, not overfilled).

         2. Individual bins are to be touched with sterilized gloves when moving to the warm zone/near door for pick up.

         3. Bins are to be returned with gloves on. Alcohol sterilization of gloves to be performed after (bin becomes public use item once removed from personal space).

      iii. Shared items such as culture flasks, autoclave bottles, etc. must be cleaned and returned to shared spaces.

      iv. Personal items (pens, electronics, or other items in contact with the individual) are to be stored away from public areas to avoid accidental contact.

      v. If a personal office has a door that is in use, the knob should be cleaned at the beginning and end of the day.

      vi. Gloves should be sterilized with an alcohol solution before handling public use items.
vii. Public use items must be cleaned with an alcohol solution before return to public spaces.

c. High Touch and Shared Equipment Obligations

i. Bay areas should be clear of boxes, supplies, or other obstruction to avoid additional chances of contamination.

ii. Sinks will also remain clear to avoid touching each other’s supplies, room must be made for handwashing.

iii. The conference room table will be cleaned after each use (eating, working, etc.).

iv. Printer high touch surfaces (power button, paper tray) will be wiped after use.

v. Public doorknobs such as the entrance to BAG 192 should be cleaned regularly throughout the day. Sanitizer pumps will be placed both inside and outside of BAG 192. Disinfectant wipes will be placed inside BAG 192.

vi. Public cleaning equipment will be disinfected before distribution to lab members.

vii. Light switches in public areas should be used as little as possible. If used, whoever switches the light is responsible for safe handling and disinfection with non-flammable disinfectant.

viii. Shared equipment must be meticulously cleaned before and after use. Coordination with outside labs is required to ensure they also follow cleaning standards.

   1. Appropriate disinfectants to be used on equipment where IPA/Ethanol may be damaging. Assess sensitive equipment before applying harsh disinfectants.

d. HIGH-TOUCH LOCATIONS AND EQUIPMENT: The following are locations and equipment with a high frequency of handling and contact. As such these represent a higher probability of viral loading in the work area and should be disinfected on a routine basis.

i. Benchtops

ii. Equipment handles and latches

iii. Equipment controls and touchpads

iv. Drawer and cabinet handles

v. Bin and water incubator lids

vi. Hand tools

vii. Micropipettes and other shared tools

viii. Faucet handles and sprayer grips

ix. Baskets, bins, trays, etc.

x. Outsides of shared chemical bottles and caps

xi. Chair backs and armrests
xii. Pens, whiteboard markers, etc.

e. Shared Items That May Require Cleaning Procedure and Logbooks:

   i. Logbooks with entry points for the date, time, name of last cleaning are to be provided for the following equipment.

      1. Room 192: front door
      2. Room 192: bioplex
      3. Room 192: large centrifuge
      4. Room 192: darkroom
      5. Room 192: gel dock station
      6. Room 192: Rotovap
      7. Room 192: Hydrogen gas reductive shaker
      8. Room 344: Acurri C6 flow cytometer
      9. Room 346: Thermo Legend centrifuge
     10. Room 346: Siemens Hematek slide stainer
     11. Room 346: Water bath
     12. Room 346A: 2 x Nikon E200 light microscopes

Encouraging Good Hygiene

1. Describe measures in your group that will promote and enable uniformly good hygiene practices:

   a. Every time a person enters the lab, she/he should wash their hands with soap and water for at least 20 seconds. Signs reminding members to wash their hands are placed at lab entrances. The first Rathod Lab bay will be designated as a washing station for those who are entering BAG 192.

   b. Every lab member will be provided with a personal hand sanitizer bottle and should carry it with them while working. The formula for the hand sanitizer is 75% Ethanol, 10% glycerol, 10% water, 5% Hydrogen peroxide solution.

   c. Personal stocks of disinfectants will be given to each lab member. They should carry these with them when working in communal spaces and clean items/workspaces with these stocks only.

2. Describe the lab policy for wearing a mask and other protective equipment:

   a. Chemistry Department policy requires masks at all times in common areas, hallways, and shared departmental facilities. Lab members are strongly encouraged to wear a mask in their work area.

      i. Face coverings/masks are considered part of your personal attire. They are not laboratory PPE rather personal attire that should not interfere with any required PPE or create any additional safety hazards.
Follow CDC guidelines and UW EH&S guidance on face mask use.

Masks should fully cover your nose and mouth. If present, adjust the wire to fit over your nose.

Always remove gloves and wash hands with soap and water before putting on, taking off, or adjusting your mask. First leave the room if adjusting your mask in any way and others are nearby.

When removed, masks should be kept in personal areas and away from any communal spaces. Contaminated masks should be put in a secondary container if keeping or thrown away in personal trash.

Just like any article of clothing or part of your personal attire, if a face mask becomes contaminated by laboratory chemicals it should be disposed of.

When removing a mask, do not touch the front of the mask.

If using a reusable cloth mask, the mask must be laundered before reuse.

EH&S also discourages the use of cloth masks for work with flammables and in biosafety level 2 or higher spaces. In these instances, surgical masks should be used instead.

Lab members have been seated 6-10 feet apart. Therefore, masks are only required when you are walking or working in hallways or shared spaces in the lab. Also, wear masks if another lab member is working within your personal work/bay space.

Lab members should wear gloves while working in the lab.

Do not touch your face, hair, headphones, computers, or other private items when gloves are on.

Gloves should be changed anytime they become contaminated or at the end of a specific operation or task.

To reduce waste, gloves can be reused in between tasks if sanitized with appropriate disinfectant. If reusing gloves you should move them back to your personal lab space so that no other lab member will be in contact with them.

A good practice is to write initials on gloves during first use (be careful the writing may come off during disinfecting and you may have to rewrite).

Communal equipment and reagents should always be handled with gloves.

Bare hands should be washed with soap and water every time gloves are removed. No communal reagents or instruments should be handled without gloves.

Dispose of gloves in your personal trash can.

Do not wear gloves outside of the lab.

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 Rathod lab group members participated in determining the lab-specific policies and procedures related to COVID-19. Detailed discussions were held on Zoom group meetings on 5/26/20, 5/27/20, 6/2/20, 6/3/20, 6/4/20, and 6/8/20. All group members are required to read the finalized lab reopening document and agree to implement outlined policies upon continued research. All
group members have been provided with a digital copy of the lab specific plan for reopening and a digitally signed copy of the policy is available online.

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 first contact a member of the Rathod group to organize any sharing of chemicals and/or usage of instruments. Visitors using specific equipment will be required to sign up for time slots using the appropriate Google calendar. Prior to entry to Rathod lab research spaces any visitor will have read and acknowledged this Rathod Lab plan for reopening.

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 and reading of the document by email to the head of the lab (rathod@uw.edu).

4. Describe any other COVID-19 related policies implemented in your group:
   Rathod lab highly encourages its members and visitors to read additional information about managing research during the current COVID-19 pandemic by visiting the following sites:

   UW Environmental Health and Safety COVID-19 prevention plan for the workplace

   UW Environmental Health and Safety protocol for cleaning and disinfecting

   UW Environmental Health and Safety guidance for mask use

   UW Environmental Health and Safety guidance for resuming work in research labs

   World Health Organization information about COVID-19
   https://www.who.int/health-topics/coronavirus#tab=tab_3

   Centers for Disease Control information about COVID-19