

**Fall 2020 Graduate Student Rotation Guidelines for the
Molecular Biology and Biological Chemistry Programs
University of Utah**
Prepared July 22, 2020

The following guidelines were developed by the MB & BC Programs to promote quality rotation experiences for students and mentors at the University of Utah under Orange Alert Level conditions necessitated by the COVID-19 pandemic. These recommendations are subject to change based on directives from the Vice President for Research (VPR) and University of Utah guidelines. The utmost concern is the health and safety of students, faculty, and staff involved in the Programs. Please check the VPR's websites for:

- Updated guidance on safety compliance: <https://research.utah.edu/coronavirus/index.php>
- Description of Alert Levels: <https://research.utah.edu/coronavirus/research-alert-levels/index.php>
- FAQs: <https://research.utah.edu/coronavirus/frequently-asked-questions.php>

The situations created by the COVID-19 pandemic make it difficult to provide uniform recommendations for rotations during the Fall semester of 2020. At this point, we recommend hybrid rotations, starting with virtual interactions and moving to limited in-person interactions upon consent of the student and approval of the PI, Department Chair and/or Departmental Safety Committee as appropriate. Most classes are expected to be online for the fall semester. We hope that by next Spring, in-person interactions will be less of a problem, however, if that is not the case then these Guidelines will also serve as the format for Spring semester rotations. Nevertheless, if the situation does improve for the Spring, it may be possible to have rotation students re-visit one or both of their Fall rotation labs for an abbreviated supplemental 4-week in-person rotation in late Spring, so that the students and labs can get better acquainted prior to making any long-term commitments. The Bioscience Programs will continue to monitor the situation and provide updated guidance as needed.

SUGGESTIONS FOR EARLY FALL 2020 SEMESTER ROTATIONS

We strongly encourage PIs interested in students to consider development of virtual-only and hybrid (virtual/in-person) rotation options for their labs. Notably, adjustments to the Fall rotation schedules have been implemented due to campus closure for the US Vice Presidential debate and the COVID-19 scheduling changes. Namely, there will no longer be a Fall break in October and all classes will be virtual after the Thanksgiving holiday to discourage students from coming back to campus after the break. The current rotation schedule for the Fall and Spring semesters is:

1st Rotation: Monday, August 31 - Tuesday, October 13

2nd Rotation: Wednesday, October 14 – Wednesday, November 25

3rd Rotation: Monday, January 11 - Friday, March 5

Virtual Rotation Suggestions:

- Have student attend virtual lab meetings and lab journal clubs. This will give a feel for the type of interactions between lab members and the PI.
- Have student attend Departmental RIP, seminars, etc. and encourage them to reach out to students in other labs for a better understanding of Departmental dynamics.
- Encourage frequent communications with PI and individual lab members via Zoom regarding lab projects. Weekly meetings, at a minimum, are highly recommended.
- Follow lab members via video (Zoom, Facetime, etc.) through experimental procedures. This may require IACUC approval for experimental animal manipulation.
- Consider *in silico* analyses of data sets (e.g., bioinformatics). This could involve reanalysis of lab data sets or new comparisons using archived data at NCBI, SRA, etc.
- Read and discuss PI grants.
- Schedule time with lab members to discuss lab grants, papers, experimental questions, and future directions.
- Develop research questions that can be expanded and turned in for a rotation report. Prepare a presentation for the lab group.
- Have student read and provide input on manuscript drafts (review articles or primary research papers).
- Providing and sticking with a clear schedule for students will help keep them engaged.

In-Person Rotation Suggestions:

Under Orange Alert Level guidelines, rotation students may be able to have short visits to the lab when the presence of other members is limited (i.e., 2 people per full bay). This may allow a student to get a better feel of the lab organization, layout, and dynamics. This needs to be approved by the Department Chair and/or Departmental Safety Committee as appropriate, and cannot conflict with VPR guidelines.

- Laboratories with low densities of members performing wet-lab work may be better situated to accommodate limited in-person rotations. This will depend on the number of individuals permitted in a lab simultaneously as directed by individual Department Chairs and/or Departmental Safety Committees, and will likely vary among departments. Per University policy, no more than 2 people are allowed per full bay. Some departments and buildings may have stricter guidelines, which **must be followed** for rotation students.
- Time in lab must be limited to what is necessary to understand the work, and must be staggered to meet VPR requirements for the Orange Alert Level status.
- Lab personnel, including rotation students, must be distanced by at least 6 ft and wear a face mask. Some types of lab work will more easily accommodate this restriction than others.
- Only one person at a time is allowed in small areas such as tissue culture rooms, most microscope rooms, fish rooms, and other sensitive equipment rooms. This is not likely to accommodate effective training.
- Under current Orange Alert Level guidelines, rotation students are not allowed to enter the Vivarium and other core facilities as indicated. No advice has yet been given for Yellow Alert.
- Students are encouraged to self-identify if they consider themselves highly vulnerable or live with a vulnerable individual (immunocompromised, chronic disease, etc.). We do not expect

any declaration of medical issues, unless a student is comfortable providing this information. This could help guide students and advisors in selecting labs for rotations and/or projects. A student wishing to only do a virtual rotation should consult beforehand with the PI. Any student who feels vulnerable due to COVID-19 must contact the **Center for Disability and Access** at the University of Utah to determine appropriate accommodations prior to starting rotations (<https://disability.utah.edu/contact.php>).

- Some procedures (such as PCR, Western blots, etc.) may be amenable to teaching and supervision from a distance with the aid of streaming video and online tutorials.

FALL 2020 ACTIVITIES and OTHER CONSIDERATIONS

1. Initial meetings with Office Staff will be virtual, including document signatures, questions and guidance. Any in-person interactions will follow guidelines for face masks, 6 ft of distancing, and groups of 10 or less.
2. New graduate students will attend a virtual pre-rotation **Student Orientation** meeting on Monday, August 17.
3. The **Student Retreat** will be held virtually on Friday, August 21.
4. The **Bioscience Symposium** will be held virtually Tuesday, October 13.
5. **Virtual training sessions** will be offered for lab safety/chemical hygiene, Bloodborne (and BSL2) Pathogens, and Ethics.
6. The Office of Equal Opportunity and Affirmative Action (OEO/AA) will provide virtual sessions to discuss the policies and processes for addressing discrimination, harassment, and sexual misconduct (<https://oeo.utah.edu/>).
7. **Meetings with Academic Advisors:** Meetings between each student and their Academic Advisor can be virtual (via Zoom or other tools) or in-person, if both participants are comfortable meeting with masks and maintain social distancing. These meetings should take place before the start and at the end of each rotation and should include discussion of specific lab requirements and lab ability to accommodate virtual rotations. This Fall, advisors will also meet in small groups with their trainees for mid-rotation reports. These meetings will be held with appropriate social distancing and masks, or students can opt to join in virtually. Each rotation student will give a brief (~5 minute each) description of their rotation to date. The goal is to increase safe interactions among new students while ensuring that rotations under these unusual conditions are proceeding in a productive and beneficial manner.
8. **Peer Mentors:** Virtual meetings will be held, with the possibility of small group gatherings with appropriate social distancing and masks.
9. **FRIS Poster Sessions:** The live FRIS poster session requires closer than 6 ft contact and groups >10, and is therefore not compatible with the Orange Alert Level. This Fall, FRIS posters will be presented in groups online, with each PI providing a 15-minute description of their research and lab environment with another 5 minutes for a live question/answer session. a similar approach was successfully implemented by UROP this past spring. Each faculty member will have their own Zoom room, and students will rotate among these rooms. Students will be assigned ~4 labs per session, and allowed to choose from among other labs during an “open house” period. Specific details for the FRIS Poster Sessions will be forthcoming.

10. **Courses:** Most courses are expected to be online for the Fall semester. Small in-person discussion groups may be possible, if Orange Alert Level guidelines can be followed. Discussion groups will need to be monitored for inclusion.
11. **International Students:** International students cannot meet registration, enrollment, and financial requirements unless on campus, and will need to defer if they are not able to arrive within 10 days after classes begin (by Friday, September 4th).
12. **Student (and dependent) Illness Impacting Academics:** It is likely we will need expanded flexibility for missed classes. The types of documentation and accommodations required will be set by Student Services.
13. Accommodations for virtual attendance will be available for any student uncomfortable with in-person meetings during the fall semester (for any reason).

OTHER KEY POINTS TO KEEP IN MIND

1. PIs wishing to take a student during the 2020-2021 academic year **must be willing** to take a rotation student during the Fall semester. We will be in trouble if all labs try to defer rotations until Spring. Keep in mind that while we all remain optimistic that the circumstances will improve by the Spring semester, there is also the possibility that this will not be the case.
2. Only one student is allowed to rotate within a lab at a time. Exceptions require permission from the respective Program Director.
3. Traditionally, rotation students are expected to spend ~20 hours/week in the rotation lab. Keep in mind that this may be difficult under Orange or Yellow Alert Level conditions and with lab activities relegated mostly to the virtual realm. Doing well with the coursework is, as usual, the priority for rotation students.
4. At the end of the year, a lab may accept no more than two students without permission of the Department Chair and Program Director.
5. PIs are expected to engage and meet regularly with their rotation students.
6. Students who feel that they only want in-person rotations are encouraged to defer starting graduate school.

The situation with the COVID-19 pandemic is fluid and these guidelines are therefore subject to change if safety levels transition to Yellow Alert or Red Alert. Depending on the course of the pandemic, and guidelines from the VPR's office and individual departments, in-person interactions may not be possible. Please keep up with and implement guidelines from your individual department and the VPR's Office as the COVID-19 pandemic continues to evolve. In addition, students and faculty should practice safe behaviors outside of lab – wear masks, avoid crowds, keep safe.