

# **HAINER LAB EXPECTATIONS**

## **INTRODUCTION**

A major goal of the Hainer lab is to foster an environment of consistent scientific excellence and personal development. This will support every lab member in reaching their full potential and helps us have fun while doing great science. We want you to be happy and productive while you are here. This lab manual is a first point of reference for current lab members as we strive to achieve these goals, and it serves as a general introduction for prospective members. Having a lab manual helps us communicate with each other. It reminds us of ideas that are core to the lab culture and tidbits of information that might otherwise become lost.

To begin, the Hainer lab is committed to fostering inclusivity in our pursuit of scientific discovery. In our pursuit of knowledge, we encourage an environment of collaboration, open communication, and trust, which welcomes diversity and respects differences of opinion. It is these principles that allow us to discover new ways of thinking and behaving which lead to innovation and scientific success.

## **WELCOME!**

This section is the on-boarding guide where you can find information for how to ensure that you are properly set up to participate in the lab. If you have any additional questions, feel free to ask anyone! We're all happy to help.

Upon arrival, things to get access to:

### Hainer Lab Box

- Accessed through my.pitt.edu; you will be invited to join
- Protocols, forms, databases, etc. are all kept on our shared Box

### Hainer Lab Slack

- Download the Slack Application on your mobile and computer
- Use for important lab and personnel-related updates and communication

### Hainer LabArchive Electronic Notebook

- Access LabArchive through Pitt; you will be invited to join

### TC Room Door Access

- Email Sarah your Pitt ID information and she will get you access to the TC room

### Training

- Please make sure you take all the applicable training to work in the lab and that you are up to date on your conflict of interest form. Training includes chemical and safety, bloodborne pathogens, formaldehyde safety, and dangerous goods shipping.

### Server Access

- All genomic data is analyzed and stored on the Pitt CRC (<https://crc.pitt.edu>) computer cluster and specifically, the HTC server. Once you are ready to analyze data, you should get access to the server by discussing with Sarah

## **GENERAL POLICIES**

### **Safety**

Safety is the first and foremost priority. If there is a serious emergency such as a fire, injury, etc, call 911. Then immediately call campus police (412-624-2121) and Sarah (215-565-6758). A complete list of contact information of all lab members can be found on the lab wall. Here is a list of Pitt specific safety numbers: <https://www.safety.pitt.edu/emergency-contacts>. Any safety concern should be brought up to Sarah right away. If you see something that is not right, speak up right away! Your help in keeping the lab safe is critical. Currently, Dave Klein serves as our safety officer, so if you have any (non-emergency) questions, please consult Dave. It is Pitt's policy that all workers in the lab are covered by health insurance. Please make sure you are either personally enrolled or covered by your family plan.

### **Code of Conduct**

All members of the lab, along with visitors, are expected to abide by this code of conduct. All members are expected to help ensure a safe work environment for everybody. The lab is dedicated to providing a harassment-free experience for everyone, regardless of gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, or religion (or lack thereof). We do not tolerate harassment of lab members in any form. Sexual language and imagery are generally not appropriate for any lab venue, including lab meetings, presentations, or discussions. However, do note that we work on biological matters so work-related discussions of, e.g. animal reproduction, are appropriate. Harassment includes offensive verbal comments related to gender, gender identity and expression, age, sexual orientation, disability, physical appearance, body size, race, religion, sexual images in public spaces, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome sexual attention. Members asked to stop any harassing behavior are expected to comply immediately. We expect members to follow these guidelines in all in-person, phone, or online communications, lab-related events, university events, conferences, etc. If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact Sarah immediately. If you feel that another lab member is not following the code of conduct outlined here, then in a polite, neutral, and professional manner address this with the individual. However, if you do not feel comfortable doing this, or find it ineffective, inform Sarah. If Sarah is the cause of your concern, please seek help from another PI in the department (such as Karen Arndt, Miler Lee, or Craig Kaplan) or discuss the issue with HR.

### **Implicit Bias**

Implicit bias refers to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner. These implicit associations cause us to have feelings and attitudes toward others based on characteristics such as race, ethnicity, age, and appearance. These associations develop over the course of a lifetime beginning at a very early age through exposure to direct and indirect messages. We all have implicit biases. The first step is recognizing this. Once we do, we can take active steps to correct and avoid the negative impact these biases might pose to ourselves and others. We encourage you to assess your own implicit biases using the Implicit Bias test (<https://implicit.harvard.edu/implicit/takeatest.html>). Please let Sarah know if you feel she or anyone else in the lab is acting towards you or someone else in a biased or unfair way.

### **Research Integrity**

We expect lab members to be honest in scientific communications both within and outside the lab. We expect that lab members will design experiments in a manner that minimizes both bias

and self-deception. We expect that lab members will keep agreements, be careful, and share their code and results openly with the scientific community. We expect that credit will be given where credit is due, including in scientific writing. Plagiarism is not tolerated, and it is your responsibility to know the definition and scope of plagiarism. It is never okay to tamper with data, make up data, omit data, or fudge results in any way. Science is about finding out the truth, and null results and unexpected results are still important. Research misconduct is completely unacceptable! While a full enumeration of ethical considerations is outside the scope of this document, please don't hesitate to raise any questions or concerns that you have at any point with Sarah. Any perceived cases of scientific misconduct by lab members should be brought to Sarah's attention immediately in a private meeting. If you are concerned about Sarah's practices, please bring it up with Dr. Jeffrey Lawrence, who is the Chair of the Department. More information about the Research Integrity Office at Pitt can be found here: <http://rcco.pitt.edu/rcco-offices/research-integrity>.

## WELLNESS POLICY

We are all here to grow as scientists. However, that should never come at the cost of your well-being. Your mental and physical health are an important consideration in all that you do while in the lab. Moreover, success should not come at the cost of maintaining your interests/hobbies or healthy relationships in your life. In fact, you are more likely to be successful if you take care of yourself and give time to the things outside of work that matter to you. Below are some general guidelines on well-being, but every situation is unique, and Sarah is always open to discussion on this topic, so don't hesitate to ask.

**Mental and physical health concerns** – if you are not feeling well, either physically or mentally, take the time that you need to seek out help and take care of yourself. If you are struggling with depression or anxiety and wondering what to prioritize – it is your health. If you have an acute situation that requires help, take the day off with no questions asked. If you are going to be out for an extended time or miss a group meeting, just give Sarah a heads up so that she knows you are okay – no need to give details if you don't want to, it is sufficient to email and say that you have a “personal health emergency”. If you need to take more substantial time off, you can work with Sarah to facilitate this. Being an undergraduate, technician, graduate student, or postdoc is stressful. We all care about you and are here to support you – just let us know how we can help.

**Personal emergencies** – You can share as much or as little detail as you are comfortable sharing with Sarah. These situations are inherently stressful, so make sure you are taking care of yourself.

**Work-life integration** – Being ambitious and hard-working are part of our lab culture (and science in general), but it should come from a perspective of driving yourself out of the fun of pushing your limits and exploring what you are capable of. The key is to know your limits. Managing your motivation and work habits while integrating your interests and commitments outside of work is key.

**Imposter syndrome** – Imposter syndrome can be defined as persistent thoughts and feelings of self-doubt and a fear of being unmasked as a fraud, academically or otherwise inferior. Those that suffer from imposter syndrome (which could be any of us) have the inability to value and incorporate their abilities, skills and accomplishments into their mind and perceive themselves as significantly more inferior than others do. First, we tend to see all their successes and not their non-successes. Second, there will always be someone who has accomplished more than you. Do not compare yourself to others. Everyone is different. More importantly, do NOT compare yourself to the cumulative successes of multiple people in your cohort. Remember, we are all on a growth trajectory and the people we look up to were once where we are now. All of us are doing the best job we could, which is all we can really hope for. Although

we should aim to minimize feelings of self-doubt, such lingering feelings can be channeled into productivity. They can motivate us to strive for more than mediocrity and to get outside of our work and see it from another point of view. Make room for improvements and challenges. Keep a record of your successes, no matter how small—use it as positive reinforcement when times get tough. While rejections are inevitable, the Hainer Lab is committed to providing opportunities that will challenge you in a constructive way.

## **SCIENTIFIC DISCUSSION**

The Hainer lab is an Open Science, supportive environment. We want every member to succeed in their scientific research. That means, you should feel comfortable asking any member of the group any questions. Discussing your results – both positive and negative – can be beneficial to your career. You can learn from others mistakes and from their successes. You can also expand your knowledge base by understanding every lab members research project. You should be able to describe your colleagues' projects in a couple sentences to other scientists. If you can't, we recommend setting up a meeting with your lab mates to learn more about their research.

## **WORKING IN THE HAINER LAB**

### **Work Ethic**

Serious scientific research endeavor is hard work. It requires attention to detail, dedication, and perseverance. These qualities are not measured by the number of hours you physically stay in the lab. Rather, it is measured by your ability to stay focused, to plan your experiments and manage your time, to execute an experiment properly, and to finish a research project. An important way to drive your project forward is to work smart. This means being efficient with your time - prioritizing your experiments and other duties. All trainees should consider multiple strategies and select the best one. Think out loud. Ask your peers and mentors for advice. Discuss with the lab. Use your colleagues and mentors as resources. Effective time management is also key. Work productively but be realistic about your responsibilities and the time that you will take to complete and schedule accordingly.

### **Work Hours**

The Hainer lab does not institute fixed work hours. We expect all to be self-motivated and for the number of hours worked to rarely be an issue. If Sarah has to start keeping track of your hours or monitoring your time, there is a problem. A flexible time schedule is one of the many perks of our lifestyle. We ask, however, that we all be in the lab the majority of the business workday (9-5) so that interaction with colleagues can occur for their and your benefit. In other words, we ask that people do not routinely spend the bulk of their workday outside those hours. Staff members are expected to work 40 hours per week and have consistent work hours on weekdays. This will help support ongoing projects and facilitate interactions between lab members. Ultimately, what is most important is that you maintain a high level of productivity.

All new members are expected to first start with a ~9–5 schedule. Eventually, you may find that your schedule becomes more dependent on the demands of your experiments, and after some time and independence, this schedule can be modified to suit your working style. All graduate students and postdocs are expected to take responsibility for their projects and career development. All graduate students and postdocs are advised to work consistently in the lab for at least 8 hours per day on weekdays. Long hours, working at home, and (sometimes) working

on the weekend is part of the life of a scientist. A schedule that works for others may not work for you. Productivity requires both hard work and thoughtful planning and design. While we will not clock your hours, whether you are putting in sufficient time to accomplish all your work will be noticed. Please also respect others' time. Communicate to other lab members if you will be late to a meeting or late using equipment that they are planning on using next. Weekends are primarily for relaxing and recharging, and we believe strongly in achieving a healthy work-life balance. However, there will be times where weekend work is required to keep projects moving forward, or where sample analysis/writing must take place on the weekends.

Research is not generally a regular 9–5 job, and being in lab 40 hours is not the same as working 40 hours. While you are in the lab, we expect you to do work directly related to lab (both bench work and desk work). This means doing homework, web surfing, checking social media, and generally distracting yourself from the lab are not good practices. If certain tasks (data analysis, coding, writing, etc.) can be done more efficiently outside of the lab, you are more than welcome to do so. If you are unproductive in the lab, please go home or find something else to do instead of affecting others negatively. If you need more things to do, please let Sarah know. Importantly, if you are unhappy in the lab or uninterested in the work, please discuss with Sarah as you may consider leaving the lab.

## Planned Absences

Please let Sarah know if you will be out of the lab for more than one day and the duration of and general reason for that absence (e.g., vacation, conference, etc.). Please notify the lab by writing on the whiteboard in the break area (Example: "Sarah traveling March 1-6, Conference"). This is so that if someone is not here we know that it is not because of an accident and we can also plan conversations appropriately, know when you're back to find samples, etc.

## Lab Meetings

**Attendance** – We expect all to attend our lab meeting as well as the joint lab meeting (to be attended by everyone except undergraduates) when in town, though will be understanding of extraordinary circumstances. Please be on time.

**Presenting** – Everyone should present at least 1 lab meeting per semester. If you are presenting, please arrive early to put your presentation on the screen.

**Participation** – We typically open the meeting with discussion on any lab issues (e.g., with the TC room, equipment, and other shared resources), important news, and upcoming events. Please let us know at this time if there is any lab business you think is necessary to discuss with the group.

During lab meetings, everyone should **generate at least 1 question** that they had during the presentation. These could be words you don't know, or a concept you don't understand. Also, don't be shy about sharing ideas or questions – others may have the same questions, and 'silly' ideas will still help the creative process. Likewise, please be mindful that everyone in the room deserves an equal opportunity to talk. Some are more reticent to do so and need some "space" to offer an opinion. Please don't dominate the conversation and feel free to continue giving input after the meeting, one-on-one with the speaker.

## Practice Talks

We always look forward to providing feedback on practice talks, as it is fun to see your hard work summarized in this way. Unless you have given the exact same talk before (in recent time), please schedule yourself a practice talk before any known commitments (conferences, MCDB seminar, etc). You will also be responsible for reserving a room (see Meagan in main office for help with this). If you know of your talk far enough in advance, we will put it on the lab meeting schedule.

Please print out copies of your slideshow prior to your practice talk, as it will be easier for everyone to write notes on this to provide feedback.

## **Seminars**

Seminars can be enlightening for both the scientific content (even if unrelated, it can either expand your scientific knowledge or provide new thoughts for your own science) and as an example of a presentation (whether good and bad). Therefore, we recommend and support attendance to Monday Departmental and Friday MCDB seminars to all lab members.

Attendance is required at 70% for graduate students, and therefore I urge you to attend the majority of seminars for which you are present. Additional seminars throughout the week should likely be attended only if of interest (ex: Tuesday Magee Women's Research seminar series, Wednesdays E&E program seminars). Finally, monthly PITNAC (First Fridays at 3:30) and bi-annual Chromatin Club (December/May) should be attended, if possible.

## **DATA MANAGEMENT**

### **Lab Data**

Each lab member should back up raw data as well as the metadata (see below) needed to reproduce all processing/analyses. Lab data should be stored in at least two of the following places: 1) local hard drive, 2) external hard drive, and 3) CRC server. You should not manipulate master datasets. Please make a local copy on your computer/your server space and work off from that. Your experimental notes and analysis codes are a crucial resource for the lab. They must be available upon request and usable for verifying data in any publication, should questions arise. Before you leave the lab for good, or upon completion of a project, you must archive old datasets and back them up. We will develop the instructions for this when we reach our first inactive dataset(s).

### **Notebooks**

In the Hainer lab, we keep Electronic notebooks through Labarchive as well as keeping paper notebooks during experimentation. Never discard paper notebooks, and make sure your Electronic Notebook is 100% accurate, up to date, and complete. The paper notebooks are meant to supplement and be used during experimentation. The Electronic notebook is meant to be your legal, binding document of your faithful work.

Keeping a complete and accurate record of experimental methods is a vital part of science. Your laboratory notebook is a permanent record of what you did and what you observed in the laboratory. Learning to keep a good notebook now will establish good habits that will serve you throughout your career. Your notebook should be as detailed as possible, recording what you do, and why you did it. A good test of your work is the following question: could someone else, with an equivalent technical background to your own, use your notebook to repeat your work, and obtain the same results? For that matter, could you or another lab member come back six months later, read your notes, and make sense of them? If you can answer yes to these two questions, you are keeping a good notebook. In addition to key experimental conditions, date, time of experiment, name of the experimenter, should be recorded for post hoc analysis to determine if they contribute to the observed results. You should feel free to record your mistakes and difficulties performing the experiment—you will frequently learn more from these failures, and your attempts to correct them, than from an experiment that works perfectly the first time. If you make a mistake, do NOT obliterate it! You and others may need to read your mistakes later—perhaps you were right the first time! Use a single cross out and EXPLAIN why it was an error. It is extremely important that your notebook accurately records everything you did.

My general guidelines are:

1. Use a separate notebook for each project.
2. Date every experiment.

3. Indicate the overall purpose of the experiment.
4. Record full details of materials and methods.
5. Include all “back of the envelope” calculations (i.e., don’t use the back of an envelope, paper towel, etc.) so that these can be checked if there is a problem (ranging from how you made a 10 mM stock of some reagent to how you made a reaction mix).
6. Present the key results and/or refer to any electronic database with the results. Include all original data (e.g., gel photos, plots, etc.).
7. Describe your conclusions – write this for your, my, and future lab-workers’ benefit. Talk to us! State lessons learned, even if negative.

**OVERALL:** Your notebook should be so clear that anyone in the lab (today or in 5 years) could go into your notes and replicate your experiment exactly, clearly understanding what you did and why. Notebooks are extremely important. You should be writing in them every day.

### **Mistakes**

Make mistakes, it's okay! If you don't make mistakes, especially in a new lab, you are probably not trying or working very hard. However, mistakes can often be avoided by being careful. Efficiency is important, but it's okay to be slow, esp. when you are learning. Do not rush your work. Think about everything. Run through a procedure ahead of time to make sure everything is working and in place. Plan ahead to avoid mistakes. Determine how you can make an experiment easier to avoid common potential mistakes. Sarah and senior lab members can provide advice in this regard; you can learn from our prior mistakes. Double and triple check all your analyses and data. Incorporate sanity checks. Ask others to look at your code or data. We admit our mistakes, and then we correct them and move on. What matters is how you deal with screw-ups and what you learn from them. Furthermore, it is an excellent opportunity for you to identify the supportive people in the lab that will help you succeed during your research career. Utilize your environment, work hard, and ask lots of questions. Do not try to cover up or deny a mistake. If you've made an error in experimental execution, make sure to record it in your lab notebook in detail and bring it up at lab meetings so others can learn from each others' mistakes. If you do make a mistake, tell your collaborators (if they have already seen the results, and especially if the paper is being written up, is already submitted, or is already accepted).

### **Open Science**

We are all for open science, so lab members are encouraged (well, required) to share their code and data with others, whether they are in the lab or outside of it. Within lab, you can share your code and data whenever you like. However, do not share your data with the outside world until you think (and Sarah agrees) that the lab has finished working on it. This gives us an opportunity to work with the data to meet our needs (including grant needs!) before releasing it for other people to use. Generally, we will try to make our data and code publicly available. We will also share our work with the world as soon as we ready, which means preprints! The lab will have a policy to upload a preprint of a manuscript simultaneously with initial submission to a journal, for most studies. The preferred preprint servers are bioRxiv. We have not been putting PDFs of all our papers on the lab website, but you are more than welcome to share PDFs of your preprints or published papers with whoever asks.

## **RESEARCH PHILOSOPHY**

### **Teamwork**

The Hainer Lab is committed to fostering a supportive research environment. This is essential for doing amazing science. We should all be motivated by a collective mission, not just personal gain. Always remember that the success of the lab as a whole is in part due to your success.

We all bring our own expertise and strengths—our successes are shared as a team. Together, we exceed the sum of our parts. Work in the lab is most effective and productive when members have distinct, clearly defined projects/roles, yet are still sufficiently interrelated so that no one is working in a vacuum. This way, everyone in the lab can consult with and motivate each other.

### **Collaborations**

The Hainer Lab members have a wide range of expertise and experience. We hope to foster an environment in which everyone can freely discuss and learn from each other. Importantly, collaborating can accelerate scientific progress. Although all graduate students and postdocs should be leading a project, we encourage people to take on collaborations to enrich their experience. From a short-term perspective, they help the project to get done more quickly and everyone to be in more papers. From a long-term perspective, it develops leadership skills and allows everyone to be exposed to alternative technical and scientific styles. Ongoing, open communication about authorship and contributions is a must, and strong moral fiber in all participants is always expected.

### **Competition**

Even when a formal collaboration is not appropriate, communicating about progressing projects helps to inform future decisions and prevent redundancy, thereby expediting the discovery of new information and increasing efficiency as a greater scientific community. In environments where trust, openness, honesty, and mutual support are held as the highest values, competition can occur in a fun and productive way that is exciting, but not stressful. The degree of competition is an inverted U-shaped curve. Without any competition, it is difficult to focus and prioritize. When competition is too intense, quality can be sacrificed for speed. But when there is a healthy balance of friendly competition, you have peers who can inspire you to raise your standards to the next level, and in such cases, competition can also accelerate scientific progress.

### **Rejections**

Successes in both grant and papers involve a noisy, stochastic system. Only a small number of people are making decisions; only ONE bad vote is sufficient to tank your applications and papers. Accordingly, everyone gets rejections, a lot. And it never feels good, but it feels better if you accept it as inevitable. Forget the failures/mistakes of the past and press on to the greater achievements of the future. Sulk for a day. Get up and take action the next. You are allowed to take a day off, no questions asked. Do something nice for yourself. Giving yourself permission to indulge in your feelings fully (but on a limited time scale) is important and healthy.

## **SARAH'S COMMITMENT AND EXPECTATIONS OF HERSELF**

It's an honor for me to coach and mentor an amazing team of people who together drive our innovation and accomplishments. My commitment to you is to make the Hainer lab a great and fun place to do science. Importantly, I am invested in your success—the ability to graduate or move to a new position both in and outside of academia. I will provide an environment that is intellectually stimulating, emotionally supportive, safe, equitable, and free of harassment. Regardless of your personal and academic backgrounds, you can count on me to: 1) coach and mentor you with your career goals as the top priority; 2) tailor my mentoring to each individual, and it helps if you communicate your needs to me; 3) advocate for you throughout your career and help you envision, implement, and communicate your research; 3) foster an environment where people are able to give and receive feedback; 4) allow you to pursue the research that most interests you within the framework of our lab's funded goals; 5) cultivate your career

development and move on to bigger and better goals whatever they may be; 6) help cultivate positive working relationships between all members of the lab; 7) help facilitate clear communication between all members of the lab; 8) delegate responsibility and accommodate everyone's best interest; 9) listen to your feedback and concerns, be sensitive to your needs, and handle any issues that may arise; and 10) care about not only your research, but you as a person.

A two-way feedback culture is supercritical to a successful working/lab environment! We will all thrive when our environment is happy, comfortable, and supportive. Thus, any issues, even small things, should be dealt with swiftly. If you have any questions or concerns—my door is always open (metaphorically)! You are open to communicate with me at any time of day or any day of the week (via Slack or Text). You can expect that I will respond to you in a timely fashion during normal working hours. I also attend to Text/Email/Slack during the evenings and weekends and will likely respond to you then as well, though this may be slower. Of course, in any workplace issues will arise. This is unavoidable and understandable. What we can do is control how we respond. If for any reason you feel the lab is not a healthy, happy, and productive environment, please tell me ASAP. Do not wait to discuss these issues with me for fear that it will bother me. It won't. It is very important to me that everyone in the lab is happy and productive. No issue is too small. I'd much rather deal with an issue when it is in its infancy than later on when it has become unwieldy. Please also come to me if you are having issues with individuals outside our lab. I can help guide you to the appropriate resources to deal with this within the Department and University. I hope to be a life-long mentor to the extent you choose to engage me in that role.

If I am not fulfilling these expectations, please feel free to let me know! Communication is important in every relationship, including the mentor-mentee relationship.

## **Feedback**

At least once per year, Sarah encourages lab members to get together to discuss the lab environment, mentoring, etc. The contents of this discussion should be summarized in a document and put in a folder. Then, lab members can also place anonymous comments/feedback in this folder before it is submitted to me. Sarah will do her best to address the needs and requests associated with this process.

## **Review of Documents**

Peer-review is a valuable way to get feedback. We encourage lab members to look over each other's documents before (or even after) they are sent to Sarah. This method is a great way to gain a breadth of insight.

Sarah requests the following lead-time prior to deadlines:

**Conference abstracts:** please send draft to Sarah 1 week prior to deadline

**Grants applications:** please send a draft to Sarah at least 10 days ahead of the deadline.

Sarah will likely ask to see a second draft prior to the deadline. Longer grants (5+ pages) may require more lead-time.

**Paper drafts:** Sarah happy to look over portions of papers (methods or results sections) and of course full manuscripts. In general, Sarah will strive to get comments to you in less than a week of receipt.

## **Letters of Recommendation**

For the first time a letter is requested, please give Sarah at least 2 weeks notice.

For subsequent letters that are very similar to previous letters, please give Sarah at least 1-week notice.

For all letters, please send an email containing the following:

-A link to the application/job/fellowship description

- The due date **in bold** in the body of the email
- Any specific awards/accomplishments that you would like Sarah to highlight in the letter
- CV/resume
- An unofficial transcript (for grad students and undergraduates)

Sarah will notify you when the letter is submitted. If you have not heard from Sarah 2 days prior to the due date, please feel free to check in with a reminder email.

## **EXPECTATIONS OF ALL LAB MEMBERS:**

In the Hainer Lab, we want everyone to be honest, hungry, humble, and happy. You are expected to bring your enthusiasm and curiosity to the lab. We ask everyone to have a proactive attitude and to contribute to the Hainer Lab. As a member of the lab, you are expected to participate fully in the team, both intellectually and operationally. It is up to you to make the most of all the training and opportunities you are given.

Lab members come from diverse personal and academic backgrounds. We ask all lab members to treat each other with respect and dignity. Disrespectful behavior, harassment in any form, or scientific misconduct of any kind will not be tolerated. It is common courtesy to keep common spaces clean and organized. If you use a shared piece of equipment, clean it and return it to the common area after use. Do not hoard common equipment and reagents. If you use up common supplies and solutions, please refill them and list them on the whiteboard. Mistakes and accidents happen in the lab, and that's ok. If you break something, say something. By saying something, you alert people of what happened and allow others to learn from the situation. Most conflicts arise when people feel that they are losing appreciation, affiliation, autonomy, status, and/or role. If there are any confusions, please do not assume anything and bring them to Sarah's attention immediately.

Please discuss any issues with neutral, professional, and proactive communication and be kind and respectful to others at all times. Acknowledge responsibility for your actions and avoid providing excuses for your behavior. If you have created an issue, attempt to solve it before it affects other's work in the lab. If you do not know how to fix an issue that has arisen, ask for help. Do not wait for someone else to notice the issue, as it may negatively affect lab research. Make smart choices. Be respectful, be kind, be safe, be proactive!

### **Expectations of Undergraduates:**

We expect undergraduates to work 8-10 hours per week during the school year and ~20 hours per week during the summer. About 10% of that time should be devoted to lab meeting, 20% devoted to lab chores, and the remaining 70% should be split between research, reading papers, and preparing presentations (depending on the week).

### **Expectations of Rotation Students:**

We expect rotation students to be in the lab when they do not have classes, during normal business hours. You are training, so your schedule needs to overlap with those training you (to be worked out on a daily/weekly basis with your trainer). Classwork is imperative, but should be done during breaks in experiments, in the evening, and on weekends. When heavy classwork weeks arise, lower experimental load is perfectly fine. You are trying to get a sense of the lab, and we are trying to get a sense of you, so being in the lab is essential for these two evaluations to happen.

Do not give yourself excuses to be mediocre. However, the rotation is short (ten weeks) and likely not long enough to produce meaningful datasets. Give yourself permission to make minor progress. It is okay to mess up in lab, and more likely than not, you will. You are still learning. But try not to make the same mistake twice. Don't be afraid to ask for help or advice! Importantly, use this opportunity to explore what you found fun to do or learn. Part of your job as a rotation student is to demonstrate your potential value to the lab. So be a good lab citizen and

demonstrate your value as a colleague. Lab members often have a lot of say in who will get an offer to join their lab.

### **Expectations of Technicians:**

Technicians are required to work 37.5-40 hours a week. The majority of these hours should overlap with regular business hours, so that interaction can occur between you, Sarah, and other lab members. Also, picking up packages, delivery of packages, and chores typically occur during business hours and these should all be overseen by technicians. Your hours should be broken as such: 10% of time spent at lab meetings, ~30% devoted to lab chores and lab organization, and ~60% of your time should be spent on research, reading papers, and preparing presentations (depending on the week).

### **Expectations of Graduate Students:**

A PhD is a self-driven academic position. Your work hours and expectations are entirely dependent on your own drive. That being said, Sarah expects graduate students to put in a minimum of 40 hours a week, as you will never complete your PhD if you do not. But this isn't always pipetting – planning projects, reading papers, designing experiments are essential to driving your research forward. Once your comps are completed, you should be fully immersed in your project(s) and spend your hours thinking about and performing work towards the goal of obtaining your PhD.

Graduate students are expected to have at least one accepted first author publication before defending. All students are expected to prepare and assemble drafts of figures and texts during manuscript preparation. All figures will be made using Adobe Illustrator. Each student will be assigned at least one project that will lead to a first (or co-first) authorship position.

### **Leaving the Lab**

To ensure a smooth transition, please let Sarah know as soon as possible when you will be moving on. When you leave the lab, we expect you to clean out your old possessions and expired reagents/samples. Please make sure you organize your lab notebooks, reagents, and data so that others can follow your work. We also want you to train a successor before you leave the lab. Lastly, we are interested to see where all trainees end up in life. Please stay in touch; we would love to hear from you!

## **MANUSCRIPTS**

Typically, each study will take 2–3 years to complete.

### **General Principle and Responsibilities**

Authorship is the primary mechanism for determining the allocation of credit. Authorship assigns ownership, responsibility, and accountability for the content and integrity of scholarly work and intellectual products. Authorship should be limited to those who have made a significant scientific contribution to the concept, design, execution, or interpretation of the research study. Authors should ensure that care and effort have been taken to determine that all the data are complete, truthful, accurate, reasonably interpreted, and retrievable for reanalysis. Authors should ensure that in-house developed reagents and codes used in the study are fully-tested and are in a distributable format. The Hainer Lab is dedicated to producing robust, reproducible science. Data manipulation of any kind will not be tolerated. If you see someone doing this, please contact Sarah immediately.

### **Arrangements and Expectations**

To reflect our mission of teamwork, all lab members are encouraged to collaborate and have the opportunity to receive co-authorship that reflects their contributions. Each of our research papers should ultimately tell a compelling story—and this story is the principal, tangible result of the group's work.

The team member who is most familiar with the project details and most likely to have the deepest and broadest perspective—should be the lead author. The leading author is expected to commit to completion of this project including assisting in the response to the reviewer which may span beyond their tenure in the lab. It is most effective if the same person serves as the lead author from the project's launch to publication. While the first author is expected to shepherd the paper to completion, it may not be possible for one person to oversee the whole project. If the original lead author must step down, a replacement will have to be assigned or elected. The project/manuscript should be 'owned' by that person going forward. First author(s) should be responsible for the bulk of the data acquisition, analysis, figure preparation, and writing (cover letter, main text, figure legends, and response to reviewers). Co-authors are expected to contribute scientifically and participate actively in helping the leading author in the writing, editing, and proofing of the manuscript at all stages. While we generally err on the side of generosity, gift authorship will not be considered.

Authorship will be discussed on the outset and throughout project development. Negotiation of authorship (both inclusion and order) should be open, professional, and respectful. Any changes in authorship should be approved by all the original authors. If you need clarification on authorship issues, please talk to Sarah. Anyone who fails to fulfill the minimal requirements will be taken off the author list.

### Examples of Authorship Assignments

**Deciding:** Collection of vital data (e.g. key and initial observations, traces/images for figures), conceptualizing, designing, and refining research, provision of resources necessary for the study. **Sufficient:** the conception of the study, processing and interpretation of data, designs of the study, provision of specialized expertise, novel reagents and analyses. **Necessary but Insufficient:** discussing the results and implications, reviewing, editing, and critiquing the manuscript at all stages, final approval of the version to be submitted/published. **Insufficient:** technical services, editorial assistance, formatting of manuscript, preparation of research result (e.g. figures), performing basic statistical analyses, literature search, general training/supervision of junior researchers, gifting of purchased or generated reagents (unless essential for the study and not previously published).

### BioRxiv Policy

As soon as we are convinced that a manuscript is ready for submission, we will likely upload it to a preprint server (bioRxiv, pronounced bio-archive) at the same time or shortly before we submit to a journal. We will do this for several reasons: 1) It expands the audience that will see our papers since bioRxiv is free for everyone to access. 2) It allows us to get feedback from a MUCH wider audience than the three reviewers that will review our paper at the journal. 3) It establishes priority. A bioRxiv submission is given a digital object identifier that is searchable and citable so this significantly reduces the chance that you will get “scooped” during the long process that the paper is under review at the journal. 4) It demonstrates productivity. Submitting a finished manuscript to bioRxiv is infinitely more substantial than something you list as “in preparation” on your CV. “In preparation” is ignored by everyone while a bioRxiv preprint can be considered as productivity if you are applying for a grant or for a job. 5) There are a lot of other philosophical reasons involving taking our careers back from the publishers and giving access to science back to the taxpayers that are paying for it, but that's a rant for a different day.