**Havird Lab - Graduate Student Expectations**

Dear future or current grad student,

Congrats on joining the lab, we’re really excited to have you!

Being a graduate student is an exciting time, both professionally and personally. It can also be trying and frustrating at times, even if you’re in a great lab and a great program. This document serves to lay out some expectations for your time in the lab, in order to make sure you know what you’re getting into and you realize what is “normal” life for a grad student in the lab. This is ***NOT*** a contract that I will hold you to (or you will hold me to). Each individual will have a different experience given their own needs and desires, and this document may change while you’re in the lab. However, I think it’s important for you to know ASAP what I expect from you and what you can expect from me.

Graduate students are the heart and soul of our lab, and academic research in general. I want you to have a good experience in the lab, because without you, there is no Havird Lab… ☹

Cheers,



Justin

**Some key principles guiding the lab**

**Respect.** We respect the opinions and rights of all lab members, and we assume that lab members are being honest in their efforts and actions. We give people space to express their opinions (listen and take turns talking), and we respect our common space (both intellectual and physical space). We respect diverse backgrounds/experiences, and make a concerted effort to communicate across those experiences.

**Equitable and inclusive environment.** Fostering a welcoming and inclusive environment is

critical, and we work actively to make our lab and the scientific community a better place for

everyone. All forms of discrimination are not tolerated. We welcome diversity in all its forms

including all religions, nationality, generation, socio-economic status, first-generation,

LGBTQIA+, BIPoC, Latin, disabled, and all other groups traditionally underrepresented in

science.

**Communication.** We strive for clear channels of communication, avoiding condescending styles

of communication that can be hurtful. We are empathetic toward each other and express that

empathy in our daily communications.

**Professionalism.** We conduct ourselves appropriately, are responsive to lab requests

and emails, come prepared to our obligations, follow through with our agreements, and avoid

negativity, gossip, and poor inter-individual dynamics.

**Engagement.** We show up! We participate in departmental and lab activities on a regular basis,

and promote the broadest participation by all members of our group. We participate and help

organize lab events, outreach, or other activities. Our invitations to these events are always

inclusive. We contribute enthusiastically to events and lab actions that build our community.

**Integrity.** We pledge to uphold the highest ethical standards in research and professional actions.

**Support.** We help each other! We celebrate all successes for lab members. We openly discuss and help troubleshoot failures. We collaborate on maintaining this supportive environment not only in our science, but in our interactions, friendships, and collaborations.

**Independence.** We foster a collaborative environment, but a major goal of mine is for you to become an independent thinker. We therefore encourage lab members to pursue the lines of inquiry and methods they find most exciting.

**A typical day for a grad student**

One of the nice things about academia in general and being a grad school specifically is the varied experiences you’ll have. You can expect to spend some time working the lab doing experiments, some time in your office space working on your computer (writing a paper/proposal, analyzing data, or developing some bioinformatics pipeline), time mentoring more junior lab members, time in the field working with your study organism(s), and time in the classroom, either learning or teaching. While I don’t like meetings, you will also have at least a couple meetings per week.

**Hours and work-life balance**

There is no minimum number of hours you must work per week. I will not keep track of when you’re in the lab or at your desk. If you work a lot, that’s great. If you can work very effectively in a short amount of time, that’s equally great. You can work from your office, your home, or a coffee shop. It’s more important to me that you’re making adequate progress on your various projects. We can discuss if spending more or less time “working” if you’re struggling with meeting deadlines or feel that you’re spinning your wheels.

*Generally,*I **expect you** to be available on a somewhat regular time schedule so we can discuss research questions and ideas as they arise. This likely means you should expect to spend some time in your lab/office everyday, but it doesn’t have to be on a specific schedule and can change whenever. If you’re planning to be out of town or the office for more than a couple days (e.g., going to visit somewhere), let me know when you can so I know what’s going on. Take time off as you need, just communicate your needs to me. You can **expect me** to also be around based around a regular schedule, and my door is almost always open to chat.

Most successful grad students realize that making progress in research requires time and time management. I treated grad school like a 9 to 5 job and generally found this was enough time to do what I needed to do. Your experience will likely be different. Some experiments may require you to come in at odd hours or work for many hours at a time. These are usually short-lived and you can definitely work “more now and less later”. There are also sometimes deadlines for papers or proposals that need to be met, which might require you to work more at certain times. Proper time management can mitigate this, but it’s something that everyone struggles with.

**Salary and financial support**

You are guaranteed a certain salary and length of employment when you sign your contract at the beginning of your appointment as a graduate student. This will vary depending on what graduate program you’re in, whether you have a fellowship, etc. Some graduate students in the lab get paid more than others, and it’s not always because they have worked harder, etc. You are also guaranteed a certain number of years of being paid (usually 5), although if you’re making reasonable progress on your degree, this can usually be extended. All graduate studets in the lab are guaranteed summer salary in one form or another. **You can expect** the terms of this contract to be upheld by myself and the administration. I also **expect you** to uphold these terms.

Generally, biology graduate students make enough money to live a comfortable, but not upper-class lifestyle. Austin is expensive and is becoming increasingly so. While stipends are increasing in some graduate programs, graduate students will likely continue to have to make difficult choices about living arrangements and lifestyle choices. Your stipend should ensure you can live fairly close to campus and bike/commute using public transportation, but you might only be able to afford a small apartment or studio. Alternatively, you may be able to afford a nicer place, but have to live further away. Most graduate students live fairly close to campus in a decent apartment with a partner/roommate or in a standalone house with more than one roommate.

**Funding**

Grad students in the lab are funded by a mix of TAships, RAships, and their own grants/fellowships. See below sections for expectations of TAships and RAships.

All grad students in my lab are **expected** to apply for their own funding. This means putting in both large fellowship applications (e.g., NSF predoc, NIH F31, or Stengl-Wyer fellowships) and small-scale grants to fund your own travel and research. You can **expect** **me** to support you in your applications in a variety of ways: helping come up with ideas, draft proposals, edit them with you, actually submit it, follow up with resubmissions after they’re inevitably rejected, and find funding opportunities for you.

This accomplishes a few things:

1. It gives you “lines on your CV” – publications, presentations, service and mentoring accomplishments, and successful funding opportunities all contribute to a productive graduate career. You must have a certain number of these lines to apply successfully to your next position (postdoc, internship, real job, or whatever).
2. It frees up money in the lab for us to do other things – hire more people, do more projects, and get more equipment. This has a real impact when it comes to fellowships and supporting your own salary – graduate students are expensive.
3. It gives you more **independence** – if you secure money to do a certain project, then you can do it. Even if I’m not the biggest fan of it. You also don’t have another TA or RA commitment to worry about. Cultivating independent scientists is a major goal of me having you in the lab. If you can come up with a project and get others to buy into it, you’re halfway there (doing it is the other half).
4. It gives you experience writing proposals. This will likely be a future part of your career in some way, so getting experience doing this in grad school is important.

You can also **expect me** to constantly be applying for grants to support the lab.

**TAing**

You will be **expected** to TA at least somewhat during your time as a graduate student. Some graduate programs have an official TA requirement, but even if not, I want you to TA at least for a semester or two. This gives you experience teaching (which may be an important component of a future career), helps you learn or remember fundamental aspects of biology, and frees up some money in the lab (TAships are paid for by the university, RAships are paid off of active grants we have).

While rewarding, TAing takes a lot of time. Especially the first time you do a specific class. Therefore, you’ll naturally not be able to focus as much on your PhD research when you have to TA. Graduate students that must TA their entire time take longer to graduate than those on an RAship or their own fellowship.

Therefore, I will not allow you to TA the entire time you’re in the lab, even if you plan to mostly teach after graduate school. There are other ways to get experience teaching in addition to TAing, and to graduate you have to complete your dissertation research. Generally, you should expect to TA at most half of your time. Our goal should be to decrease your time as a TA, either with RAships or fellowships. You should **expect me** to support you on RAships and in fellowships as needed for you to complete your dissertation research.

**RAing**

You may be on an RAship at some point as a graduate student. Ideally, the grant supporting you as an RA is fairly aligned with your own research interests. In the best case, you can work on your own dissertation research while supporting the aims of the grant. However, this might always be the case. It may be that the projects you work on as part of an RAship become side projects that you take the lead on. You may also work on part of a project, where you generate data, but are not the lead on the project.

I **expect you** to work ~20 hours per week on the research objectives aligned with your RAship while you’re appointed. You can **expect me** to thoroughly discuss what these research objectives are, give you options, and outline clear goals and deliverables before your RAship begins.

**Developing ideas and independence**

Finally, a section about science! How do you decide what research you will do as a graduate student? As mentioned, a major goal for every student in the lab is to turn them into an independent scientist. Part of this is being able to absorb information from the literature, presentations, or other sources and identify interesting knowledge gaps that can advance one or more fields. Then devising an experiment or analysis plan to fill those gaps with novel discoveries. This is what I **expect you** to do.

As a PhD student, I will not “hand” you dissertation projects. You are welcome to read funded grants for inspiration, but a majority of your dissertation research ideas should come from you, not me. You can **expect me** to discuss your ideas with you at length to identify which ones are most likely to be impactful and feasible. I will not let you pursue a project I think will take too long, not produce a meaningful contribution to some field, or be too tricky. At least, not too many of these types of projects.

When you first join the lab, I may suggest a particular project that needs a lead – this is largely to get you experience working in the lab, using methodologies we use, and getting your name on a publication. These initial projects will likely be a side project for you, not a dissertation chapter. By the end of your first year in the lab, you should have a general idea of what you want to do (i.e., the overarching question your dissertation will address). By the end of your second year, you should have several clear projects (at least 3) that can be dissertation chapters. Again, we will work on coming up with these ideas together, but the “kernel” of these projects should form initially with you. Of course, things may change at any time and you’ll likely drop some projects and pick up others along the way.

**Milestones**

You’ll have to jump through various hoops to fulfill the requirements of your graduate program. This includes taking some number of required courses and another number of elective courses. You’ll also have to form a graduate committee (or two), have regular meetings with them, take your qualifying exams, submit annual check-ins to a graduate program officer, and eventually undergo a dissertation defense. These requirements are laid out in pretty good detail in the graduate handbook of the different programs. I **expect you** to read and understand this document and generally stay up to date with these requirements. You can **expect me** to also read and understand this document and prepare with you when approaching a milestone.

Forming your dissertation committee is probably the most important milestone. This is something we should shoot for you to complete by the end of your first year. Committee members might become collaborators, so it’s important for you to pick people that can help your research, but will also get along with you and me. I’ll help do this. You should have a committee meeting once a year.

**Being a good lab citizen**

You’ll be working with a diverse group of scientists, including other graduate students, postdocs, undergrads, and others. I **expect you** to support these other folks with any reasonable request. At the minimum, this would include keeping any shared spaces clean and making sure things are in their proper place. This will likely also include helping others in their various endeavors, maybe by helping out for an afternoon on an especially labor-intensive project, looking after animals while someone is out of town, or teaching a colleague how to do something. Others in the lab should also help you out with your work. You can **expect me** to also be a good lab citizen and take any complaints about bad lab citizens seriously (or any suggestions to improve how the lab functions as a group).

**Facetime with me**

While we’ll have lots of informal interactions, it’s important that we have a standing weekly meeting to discuss research and professional development. I **expect you** to attend this meeting as scheduled, although we can reschedule and cancel from week to week if needed. You can **expect me** to also be available and prepared for this meeting. At this meeting, we can discuss your ideas, current research projects, things that aren’t working, what certain results mean, and anything else. We should identify weekly goals to be met before the next meeting (e.g., run some specific samples, write a specific part of a paper, etc.). This meeting should be scheduled for 1 hr, although we don’t have to use the whole time. As you become more independent, we may also switch to meeting less frequently if everyone is ok with that.

During this time, we can also do some hands-on activities with me showing you a specific method. However, this is often too time-consuming for a single meeting, so we’ll often schedule additional time in the lab or on the computer to do hands-on activities. It might also be better for you to learn something on your own without me or from someone else in the lab (either so you understand it more fully or because I don’t really know how to do it).

**Communication**

Email should be our primary means of communicating remotely. I generally respond to emails quickly and I **expect you** to do so also if needed. If there isn’t a deadline or something approaching, we can address things via our in-person meetings, at our weekly lab meeting, or more informally in the lab (I try to check in on folks in the lab/office about once a day).

We should also have a more general “how-are-things-going” meeting a couple times a year. This serves as a good point for us to revisit any communication practices, lab policies, or other things that might be hindering your time in the lab. While you can always feel free to criticize me, this is a time to bring up any complaints we might have about our working relationship.

**Publishing**

An important part of science is disseminating your research. Right now, peer-reviewed publications are the main way we do this. While this could change in the future (peer-review is a flawed practice), research that is not peer-reviewed is currently “invisible”. It’s either hard to find, or if it can be found, it’s hard to take it at face value.

Because of this, I **expect you** to publish your work. At a minimum this will consist of publishing your dissertation chapters, hopefully as they’re being completed at not at the end of your graduate career. You should typically shoot to have all your dissertation chapters published, in review, or close to submission before you defend – with you as the first author. There’s also a good chance you will have other publications in the lab, either side projects that you lead and write up, or ones you help out with where you are listed as a co-author.

Publishing is also important for your career. Almost any career in biological research will expect a graduating PhD to have some experience publishing their work. First-author publications also let others know you can draft, edit, submit, respond to reviews, and generally lead scientific work.

Authorship can be a somewhat touchy subject, but in general **you should expect** to be the first author on projects you develop, carry out, and write up. I’ll generally be the last author on your publications if they’re carried out in my lab. For other cases, we should make it a point to discuss authorship on projects early during their development.

I will work with you throughout the writing, editing, and publishing of any manuscripts, giving you tons of feedback for earlier manuscripts and letting you transition into hopefully a more independent writer later on in your graduate career.

**Mentoring**

Most graduate students in the lab mentor undergraduates and you should **expect** to have at least a couple. Science is a team endeavor and as you transition to being a more senior member on the team, you need to learn how to effectively manage and train more junior lab members. We will discuss effective mentoring strategies and how to maximize the experience, for both you and your mentees. I also take undergrad mentorship seriously and we want to ensure we are getting people excited about science, not driving them away.

**Writing, presenting, and other professional skills**

You should **expect** to learn how to effectively communicate your science to the scientific community and to more broad audiences. This will mostly involve a lot of writing: manuscripts, proposals, and other documents. **Expect** me to help you learn how to write more effectively. This includes face-to-face time where we sit down and go over why what you wrote isn’t how I would write it. We will always go back-and-forth editing and rewriting manuscripts and proposals before they are submitted, sometimes dozens of times. You can also expect to get feedback from the rest of lab, both formally during lab meeting and informally during brief conversations or after sending a draft around. Other professors in the department may also give you feedback and collaborators should have plenty of time to give comments before something is submitted. Your ultimate feedback will come from reviewers, and we’ll work together to draft responses to any comments they make.

You are also **expected** to present your work. This will consist of mostly informal presentations during lab meeting (you should expect to update the group on your projects once per semester), and more formal presentations at national and international **conferences**. Myself and others in the lab will give you feedback on your presentation, including everything from the visuals to your speaking style, before you have to present formally.

I **expect** you to attend about one conference per year, which might include venues the lab usually attends (SICB, SMBE, Evolution) or other conferences that you’re specifically interested in. If you present your work, you can **expect** the lab to cover the costs of going to the conference (at least one per year). However, I **expect** you to also actively apply for travel funds from the department, college, and the conference itself. A successful conference may yield multiple “lines on your CV”, including some funding, the presentation itself, service activities performed at the conference, etc.

Conferences are a great way to get to know the community more broadly and get feedback on your work. If I attend the conference with you, you can **expect** me to introduce you to potential collaborators, “big names” in the field, and generally make you feel welcome in the community.

You should also expect to gain other professional skills while in graduate school, like learning to put together an effective CV or job application packet.

**Graduation**

So, what do you have to do to graduate? How long will it take? In general, you need to publish your dissertation work, fulfill the obligations of your graduate program, and get the approval of your committee to graduate. Publishing your dissertation work means that at least one chapter should be published and the other two should be in review or close to being submitted. Fulfilling the obligations of your graduate program means taking all required classes, doing the required TAing, passing all exams, writing your dissertation, etc. Getting the approval of your committee means passing your defense. Some of these are hard rules, while the publication one is a bit more flexible, but this should give you an idea of the **expectations** for graduation.

In general, biology graduate students take 5-6 years to graduate. There is a ton of variation around this though, and if you come in with a master’s degree or significant prior research experience, you’ll hopefully graduate sooner. Sometimes projects work out really quickly and easy, and other times they take a lot of troubleshooting. Students that have projects dependent on successful field seasons might take longer as well.

Finally, if you’ve got something lined up for after you graduate (a postdoc, a job, etc), myself and your committee will be more likely to feel ok with you graduating “early”.

**Your career (i.e., after grad school)**

Even though you will eventually leave the lab, we will likely continue to maintain a working relationship for many years. You can always **expect** me to provide a strong recommendation for you when it comes to applying to jobs, grants, awards, etc. We will likely continue to work together in the short term after you graduate for you to finish off any projects and submit your remaining work for publication. If you’re no longer interested in the work you were pursuing, we can discuss if it would make sense for someone else in the lab to finish it off, or for me to write it up. But as long as you still want the responsibility, the projects you lead in my lab are still “yours”, given that you make an effort to work on them.

In the long-term, I hope that we can continue to remain colleagues. This could include starting new projects together, co-authoring grant proposals, serving on committees together, etc. I still maintain active collaborations with many of my previous mentors, and I hope this will carry over to our relationship.