Jones Lab

Goals, Guidelines and Policies (updated October 2022)

Lab Mission Statement:

Our goal is to make important and exciting contributions to the scientific field by performing and publishing high quality science in an atmosphere that is collaborative, friendly, and safe for members from all backgrounds and experiences.

My role as a mentor:

My primary responsibility is to create a safe and supportive environment where lab members can learn and achieve both short and long term scientific and career goals. Every member has different goals and therefore requires different mentorship. I will do everything I can to support each lab member in ways that will facilitate their individual scientific and career goals. I also care very much about you as a human, and I want you to not only succeed but also enjoy your time in the lab.

Your role as a lab member:

Your primary responsibility is to be an engaged, collegial, and respectful contributor to the lab group and our mission. This means not only should you be advancing your own goals, but you should frequently provide feedback on others' work, help keep the lab a clean and safe place to work, and come with enthusiasm to contribute to the research and training goals of our group.

Expectations of all lab members:

- Respect each other and the unique backgrounds/experiences we have
- Be excited to do science!
- Ask for help even when you don't think you need it
- Learn from each other and provide feedback to others
- Document your work and back up your data
- Be an active participant in the lab, department, and campus communities
- Take ownership of your projects and accountability for your own education
- Accept guidance and know that I make suggestions in your best interest
- Give advance notice when you need feedback on drafts, presentations, posters, etc.

You can expect me to:

- Be your biggest advocate and support you in your professional development
- Respect your interests and be enthusiastic about your ideas
- Provide feedback on your research, writing, and professional goals
- Protect time in my schedule to meet with you when unanticipated things arise
- Direct you to resources when you need help beyond what I can provide
- Do everything I can to help you leave the lab with more opportunities than when you arrived

General Guidelines and Policies:

Communication

Good communication is key to preventing and resolving issues that will inevitably arise during your time in the lab. You should expect to have regular (usually weekly) meetings with me to discuss your research progress. These meetings are also your chance to bring up issues that arise outside of research, including topics related to educational and career development or conflict in the lab. If you need help that I cannot give you directly, I will point you in the direction of resources that can help. Please remember that I want you to succeed, and we are on the same team!

In addition to weekly meetings, we will communicate via our lab Slack and email. I will respond to you in a prompt manner, but please remember that I have many other commitments, including teaching, responsibilities to the department, my family, and other lab members. That said, I will always make myself available to you if something comes up that requires urgent attention. Calling or texting will get a faster response than Slack, which will get faster responses than email.

Time and Effort

Research takes time, and you will not be successful in achieving your goals if you are not putting in considerable time and effort into your research projects. In addition, some projects have phases which require work at non-traditional hours, sometimes including nights and weekends. Flexibility in your working hours is a perk of research, and I will not be actively monitoring which days/hours you are in the lab. That said, if your progress is slow and you are not producing what we mutually expect, consider how much time you are spending on research and related activities (reading, writing, presenting your work, communicating with others). There are resources to help with time management that are helpful independent of your career stage. I can direct you to these resources, just ask!

Note that spending 80 hours in the lab each week does not mean you are "doing it right" or going to be successful. Balancing work with non-work activities is important for your overall mental health and wellbeing, and burn-out is real. 80-hour weeks should *not* be the goal, and I strongly believe you can be highly productive and successful with a very reasonable number of hours in the lab. If you aren't getting enough done, think about your distribution of effort. Are you organized and efficient with your time? Are you prioritizing the right things? Are you struggling with an experiment, analysis, or writing and need additional support? If you feel you are putting in adequate effort but not seeing the results you want, please talk to me. Don't compare yourself to others; their circumstances are likely different, and you can improve your situation in a way that is optimal for you, your mental health, and your productivity. We all struggle with balance- I am always happy to talk about this with you and there are resources available to help.

Safety

Your physical safety is important in everything that you do in the lab. Make sure you are up-to-date and understand all necessary training as dictated by the university, department, and lab. If you need personal protective equipment (PPE) that is not available, ask before you start a new protocol. If you have not performed a protocol before and it involves dangerous chemicals, make sure you review the proper handling of those chemicals and ask questions about safety and disposal before you begin. We don't often work with very hazardous chemicals, but even seemingly harmless things can become

dangerous if the proper precautions are not taken. If you see someone doing something unsafe, please remind them of proper procedures respectfully. We are all responsible for protecting not only ourselves but everyone around us while we work. Feel free to come to me with any questions or concerns, and you can also find information about campus-specific safety procedures from EHS: https://ehs.uky.edu/.

Lab Meetings

Attendance and participation in lab meetings is a crucial component of both your personal success and the success of the group. You should be prepared to discuss your work, listen respectfully and with excitement to others, and provide feedback. The structure of our meetings will change from time to time, but in general each meeting will involve a longer-form presentation from one lab member and short updates from others. Lab meetings are a safe space to discuss not only research successes, but also elicit help and support when research failures happen (which they will! for everyone! frequently!). We can all learn from each other, and lab meetings should be a place where people feel empowered to ask questions and discuss ideas. If everyone participates, lab meetings will be enjoyable and help to meet our individual and collective goals.

Research Planning

At the beginning of each term and prior to each field season, we will meet to discuss your longer-term research goals. These meetings should be fun! I love hearing about your ideas and thinking about how each project fits into your broader research plan. Please come to these meetings prepared, having done background reading to identify a knowledge gap with specific questions you want to address, methods that may be appropriate, and ideas of expected results and analysis methods you will use for each project. We will discuss these and come up with a general plan of action, including a timeline for the experiments. These meetings will provide the scaffold for each semester and are really important to ensure we are on the same page.

Reading

Your success in research is dependent upon many things with little or no built-in accountability. It is ultimately *your* responsibility to invest the time and energy required to become an expert in your specific field of study. An important example is reading the literature. Whether you are keeping up with the literature in your subfield is largely out of my control but is critical to your mastery of your research topic. I will encourage you to read relevant papers and as a lab group we will post group-wide relevant research articles to our Slack, but it is your responsibility to read papers, think critically about what they mean, apply results to your project as appropriate, and build the context necessary to understand and articulate the bigger picture. To do this, you *must* be excited about your research topic! If your project doesn't excite you, please let me know. There are so many possible avenues of research and if you joined the lab enthusiastically but have lost that spark, I will try to help reignite it.

Writing

Writing and publishing manuscripts is one of the most important aspects of scientific research. If you design an amazing experiment and have great results but they sit on your computer (and in the cloud! more on backing up data below) and don't get published, they have no real impact. It can be intimidating to draft your first manuscript, but it is imperative that you have a plan for turning your research into peer-reviewed papers. You should plan to submit your first paper by your third year in the

lab, and I expect each student to have at least one manuscript submitted for publication prior to defending. At our annual goal planning meetings we will discuss strategies for making this happen, and I will encourage you to make incremental progress on manuscripts by writing methods as you formalize protocols, preparing figures that can be shown not only in lab meetings but also used for papers, and organizing literature you read that are relevant to a given project into an outline for an introduction. There are great studies showing that incremental writing is *much* more effective than binge writing, so I will be encouraging this and pointing you to resources that help you schedule and prioritize regular writing time.

Authorship

It is my hope that there are often collaborative projects happening in the lab, with multiple undergraduates, graduate students, and postdocs working together to make scientific insights. When someone contributes to a project in a meaningful way, they deserve authorship. What is considered "meaningful" is subjective, but performing a trivial task does not mean that you will earn authorship on a paper. At the same time, being generous with authorship has little downside, and anyone who feels they deserve authorship should speak with me and the project leader together to discuss. People who have made a substantial data and intellectual contribution to the paper deserve authorship. We will follow Contributor Role Taxonomy (CRedit) to describe the contribution of each author on a manuscript, so it is important to be clear about what each group member will do and has done. This will also help clarify the most appropriate ordering of authors. These conversations are not always easy to have, but they are important. Ordering of authors will be determined by a discussion among all authors, but the final list is under my discretion. As a general rule, the person leading the project will be first author assuming they also write the majority of the manuscript, make the final figures, and handle the submission and revisions process. If you leave the lab without publishing your work, your status as first author on a project may change. It is always best for everyone if papers are not left unwritten when you leave the lab, which is why I will be encouraging you to write as you progress in the lab and not delay submitting and publishing your work.

Data

We work with a variety of data types, including field observations, behavioral observations, molecular and genomic. It is *imperative* that you have multiple copies of your data in different locations. Imagine that the worst-case scenario is going to happen, because it very well might- your laptop will break, your external hard drive will fail, the building with your lab notebook will flood. You *must* back up your data to the cloud and ensure your data will not be lost due to an accident. This means taking pictures of handwritten data sheets, uploading these photos to the cloud and placing them in the lab shared drive. This means uploading raw sequencing data to NCBI (set the release date to the future so as not to release unpublished data) and having data on both an external hard drive and a UK/lab server. If you are collecting data in real time that at first exists in only one location, *have a plan* for how you will quickly back up those data on a regular (daily, if possible) basis. If you aren't sure how to back up your data, ask!

Lab Notebooks

Keep lab notebooks up to date and provide enough details such that anyone could read *just* your notebook alone and replicate an experiment. Refer to freezer locations for samples, online locations of any data collected, and protocols used. Write down kit names, lot numbers, and other relevant details

for reagents used. Imagine that you go on a month-long vacation tomorrow and someone needs to come in and pick up where you left off- could they? Update *as you go*- you may think you'll remember what you did last week, but chances are you won't remember at the level of detail necessary. Keeping your lab notebook updated is as important as the data itself; without knowing how you produced a result or how to replicate it, the experiment might as well never have happened. It will save you time and a lot of headaches if you write down what you do as you do it, even if it seems obvious at the time. Lab notebooks are property of the lab, but you can make copies to take with you.

Time Off

Let me know in advance when you plan to take vacation time, especially if you have animals that need to be cared for during your absence. It will be up to you to keep track of your available vacation days and to also make sure you record your time away officially through HR. If you don't track your time off through HR, issues will arise that are difficult to correct retroactively.

Personal Well-Being

You are much more important to me than the work that gets done in the lab. If your commitments feel overwhelming or you are struggling with physical or mental health, please know that I want to be an advocate for you in these situations, not just in your research and professional development. I can help you find resources, work out changes to your schedule, reduce your commitments to projects, and otherwise try to accommodate your needs. Note that I will always respect your personal information while following university policies and procedures for professional conduct.

This is an evolving document to be reviewed and amended as necessary and appropriate as the Jones Lab changes membership and structure. We are open to feedback on any and all lab policies. If you would like to leave anonymous feedback, please use our <u>online suggestion box</u>. Inspiration for many sections of this document came from the lab policies of other research groups, including the Burdine, Kocher, and Dolezal labs, as well as advice from colleagues and mentors.