

Prior lab guidelines, philosophy, and mutual expectations

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Lab Philosophy

Our lab studies how anthropogenic change affects species interactions and diversity and strategies to mitigate impacts. We are an active and supportive research group, who are excited about ecology, conservation, natural history, and field ecology. We conduct research in several different systems and usually spend our summer in the field. We have diverse interests and work in varied systems but are united in a common goal of trying to understand anthropogenic impacts on species interactions and communities. We work hard and are committed to producing high-quality, impactful science. While doing so, we try to create a respectful, enjoyable, and collaborative – team environment.

We expect that our team members are passionate about ecology, conservation, and are dedicated to learning and to be good scientists. We strive to produce high-quality science, to be creative, to be collaborative and good team members. We strive to make the lab a supportive, stimulating, and challenging environment that helps lab members prepare for the careers or their choice.

Respect, Diversity, Equity, and Inclusion:

We embrace and respect diversity in the lab of individuals concerning their sex, gender, race, ethnicity, age, citizenship, sexual orientation, nationality, socioeconomic status, religion, physical ability, mental ability, and expression. We acknowledge that science and academia are not equitable or inclusive as a result of systematic oppression and biases of underrepresented groups. I will ensure that the lab is a friendly and supportive environment conducive to learning and research. This includes ensuring that we as a group are treating each other with respect, listening to others' viewpoints and ideas, and that the lab is a place where **all individuals feel welcome and appreciated**. No derogatory terms or statements that are harmful or disrespectful to others will be tolerated, nor will statements contributing to stereotypes or generalizations. The university provides resources to report or discuss activity deemed inappropriate. Also, feel free to discuss anything with me or another member of the department. It's important to know that, as a faculty member, I am a mandatory reporter for instances of harassment or abuse. However, all information remains confidential unless you chose to release it. I'll uphold and transmit high professional standards of research and scholarship. I'll be supportive and human, and will strive to be a compassionate and empathetic advisor. I will recruit and mentor diverse lab members and be an advocate for diverse students in our graduate program.

Safety:

Health and safety are more important than research. **I expect** lab members to be aware of BU's lab safety policies, and graduate students should attend BU's safety training and should train undergraduates they are mentoring. I expect students to communicate safety-related issues with me. **Expect** that I'll provide a safe work environment by following the standards put in place by Binghamton University. This includes adhering to lab safety codes, ensuring safety measures are followed in the field, as well as maintaining physical and mental health. None of us should come into the lab if feeling sick, under medication, or if dealing with anything that might affect our ability to work. We should not do dangerous activities (or most fieldwork) alone. I will ensure there are adequate training and proper safety practices and ensure that we have sufficient safety equipment and supplies. I will work with BU and students to make sure any problems are dealt with quickly.

Research: Research is the reason we are here and is the main focus of our lab group.

I expect that students will be dedicated to performing high-quality and rigorous research and adhering to research ethics. For graduate students, when not teaching, working on classwork, or other services - additional time in the working day should be spent on research. I expect students (especially Ph.D. students) to develop independent ideas, contribute intellectually to the research, and take ownership of their projects. Students should be organized, take the lead on mentorship of undergraduates on their projects, and ensure that research is being completed at a high-quality and in a timely manner. I expect students to keep me updated regularly on their progress, pitfalls, and decisions. Students should be resourceful and keep up to date on the literature. Students should move forward in a timely manner on their projects for their own thesis and for overall lab goals.

Expect that I'll be dedicated to helping students with research - to develop high-quality and feasible research projects, and to establish protocols. I will provide the best advice I can for students' research or provide information about other resources. I'll share literature. I'll point students towards other faculty members or collaborators to try to gain appropriate advice or training for aspects of their project that I'm not an expert in. Research projects will be decided on mutually and need to be feasible within the resources that we have and the systems that we work in, and will depend on funding sources. I will work with students to secure funding for their independent ideas that may not fit into lab goals or funding. I will provide a physical workspace with resources and help keep the lab organized and functioning. I will recognize that students may have different research priorities than me (e.g., when to publish a paper, timing/order of projects). I will discuss these conflicts and be willing to compromise. It's my job to keep research moving forward at a good pace, and students should expect that I will work with them to do so. Finally, I will make sure the lab is upholding to high research standards and ethics.

Engagement:

Running a lab is a collective effort, and we all contribute to our collective success. Being a good team player and community member (of the lab, department, and broader community) is an essential part of science and any professional job.

Expect that I'll be a fully engaged and active mentor. I will be involved in providing advice to students' academic, research, and career goals. I will be engaged in students' research projects and career goals and alert students to new research ideas, protocols, training opportunities, conferences, etc. I will be an active member of the lab and run lab meetings to discuss research and other training and topics related to preparation for careers as researchers or related jobs. I will be an active member of the department – inviting seminar speakers, attending discussion groups, and working on committees to improve the department (along with being an advocate for graduate students). I'll be engaged in the scientific and general community by reviewing manuscripts and grants and performing other outreach activities.

I expect students to be fully engaged and active members of the lab. Students should come to and participate in lab meetings, and interact with other lab members. Students to be supportive and help each other out with research. If mentoring undergrads, I expect graduate students to be active mentors – checking in regularly, providing advice, being available to interact and to provide/help get resources. Graduate students should also contribute to the running of the lab. For example, they may help schedule lab meetings, or undergrad schedules, help order supplies, refill printer paper, help pick up supplies, help with truck and computer maintenance, etc. I will also help with all of these things. Undergraduates will help to keep their workstations organized and clean and will alert graduate students or me when supplies need to be replenished. Lab members should keep the lab/their work stations organized every time they used it, as work stations and equipment are shared. Look around and see how you can contribute to the smooth running of the lab. Everybody in the lab will appreciate these collective efforts.

I expect graduate students to be active participants in the department and broader community. This means attending the majority of Biology seminars (EEB speakers, especially). I also expect students to engage with other faculty and students about their research – including attending the majority of EEB lunches. Attending seminars

and discussion groups is important for gaining a breadth of knowledge in ecology and evolution (that is important for career development) and for being a professional department member. I also expect students to meet with seminar speakers (like during EEB lunch) and to be involved in grad recruitment weekend. All labs operate differently and have different expectations - we are a lab that actively engages with the department and participates in activities. I also expect students to engage in the broader community, if interested via outreach, and attend conferences and peer-review papers.

Productivity, time management, working hours:

Productivity is more important than schedules. Lab members can have some flexibility in their schedules, but should have some consistency and some overlapping time with me and other lab members.

Expect that I'll be in my office or available on Slack during regular office hours (9-5 ish). Sometimes to meet deadlines, etc. I may work evenings and weekends. **If lab members receive an email from me off-hours, I don't expect them to respond (just because I'm working after hours, I don't expect my lab members to).** I'll let the lab know when I will be away for extended periods for work or vacation. Unless I tell lab members otherwise, I'll still be able to respond to emails. Lab members can expect that I'll keep lab members on a good schedule concerning their productivity and progression. I'll work with students to come up with semester goals, and help them try to stick to these schedules. I will work hard to provide feedback on proposals, manuscripts, and presentations promptly to keep things moving forward - proposals and manuscripts (2 weeks turn-around), presentations (1 week).

I expect students to work their allotted weekly hours and generally stick to a schedule. For Ph.D. students, this is a typical work week (~40 hours per week), and this varies for other lab members. I don't expect lab members to work over 40 hours a week – however, for field work, lab experiments, or other deadlines it's sometimes hard to avoid. However, this shouldn't be the norm. We are lucky to work in a field with flexible work hours. I care about productivity more than working on a strict schedule. However, to interact with others and me in the lab, and to use shared equipment effectively lab members should keep a regular-ish schedule – generally being available during regular work hours (or a good chunk of regular work hours). This could mean being in the lab or available on Slack. **It's important to take time off for personal life and health, and I respect and value this. I am also fully understanding if lab members need time off or can't make progress for personal reasons – their health or family members' health. Lab members should feel comfortable talking to me and let me know if they need time off or me to back off trying to push research forward.**

Undergraduates are not expected to come into the lab during class break. All other lab members, including graduate students and undergraduates paid as technicians, should follow the employee holiday schedules. Guidelines for vacation time for graduate students are not clear. Here are my expectations – students should take "typical vacation time." I will not count how many days or weeks off lab members take (and I trust you to make your own decisions). Generally follow employee guidelines - for example, 1-2 weeks off during the four week winter class break seems reasonable. For students with summer funding, time off in the summer is important and is expected, but should be reasonable and scheduled around research needs. For example, we often take time off after field seasons (and before classes start) that end early August. Lab members should let me know when they will be away from the lab or research for periods.

At the beginning of each semester, students should come up with a list of goals for the semester to share with me. I expect students to manage their own time well, and I'll leave this up to them. I expect that students will check in with me about reaching their goals. I expect students will tell me if I have unreasonable expectations of how much they can accomplish and their timeline.

Publish:

We will strive for all research coming out of the lab to be published in peer-reviewed journals in a timely manner. Publications are the main currency for getting jobs (in and outside of Academia), being competitive for fellowships or grants or graduate programs. Publications are also important for the lab to continue to get funding.

Expect that I will help students publish work. I will involve students as co-authors on papers, and I will help students to publish first-author papers. For graduate students who haven't published before, I will try to have students as co-authors to learn about the process. I will provide significant guidance and feedback on their first, first-author papers. For undergraduate students, we will strive to include you as co-authors on papers (see criteria for authorship). If you do an honor's thesis or summer independent work, we will strive to have you lead a paper. For undergraduates, who want to go to graduate school in EEB, let me know and we will try to design your time in the lab to allow for potential authorship opportunities. I will provide comments/feedback on drafts in a timely manner (usually within 2 weeks). Authorship is decided by participating in at least one of the following: coming up with ideas, data analysis, writing, and or performing the work (generally not only performing the work). The order of authorship will be decided based on who contributes most to work. I will usually take the last authorship on student-led papers.

I expect that students will be motivated to publish their work. Graduate students should have multiple publications from their thesis work, and work to be co-authors on papers. **I expect graduate students to publish before they graduate in peer-reviewed journals (at least one first-author paper accepted).** Students should work on manuscripts in a timely manner. Graduate students will work to publish their thesis chapters even after graduating, or agree to being a co-author if they don't want to put the work in to be a first author. Undergraduates should talk to their grad mentor or me if they would like to work towards being on a publication and understand that it requires hard work and dedication (but worth it!).

Communication:

Regular communication is important. Given the size of the lab, I appreciate lab members reaching out to me, even if I don't reach out to them.

Expect that I have an open-door policy – drop by or send me a Slack message or email any time. I'll generally respond to a Slack message during regular working hours (unless I'm busy or in a meeting). Lab members can also text or call me for anything urgent, especially during fieldwork. I will hold regular meetings (weekly or every other week) with graduate students. For undergraduates, email me to set up meetings. I expect that lab members will communicate with me regularly. Lab members should **feel free to talk to me about any work-related or personal issues that are getting in the way of meeting any expectations. I understand that life happens, and I am sympathetic to individual needs.**

I expect that lab members will communicate with me regularly, especially during working hours. That lab members will keep me updated with respect to anything to do with their progress in the program or research. I expect that lab members will reach out to me to update me without me having to reach out to them.

Funding:

Doing research costs money, and scientists have to find our own funds for research.

Expect that I will continually do my best to secure research funding for the lab and lab members' projects. When I have funding, I will provide funding for students to work on mutually decided projects (with the scope of the funding source). Student stipends will be funded at TA's, GA's (research assistant), or Fellowships. At Binghamton TA lines are prioritized for Ph.D. students and not MS students. I will try to help students find summer funding (via fellowships or grant money). I'll be on the look-out for funding for students, and I'll work hard with students on their grant proposals. There are plenty of grants or fellowships for both graduate and undergraduate

students. **I expect** graduate students will actively look for funding for research, travel, or stipends. Students should expect to apply for several grants and fellowships over their graduate careers. Students should give me time to provide feedback on their proposals – depending on the proposal starting them ~4 weeks ahead of the due date. There are a lot of funding opportunities for undergraduates, who should reach out to me or graduate students to help with applications.

Conferences and meetings:

Lab members are encouraged to attend meetings and present their work. The department and university offer travel funding for graduate students and students should also apply for external sources of funding to help cover travel expenses. When possible, I will help fund a portion of attendance at a conference. The amount that I can contribute depends on grant funds. Also, please provide ample time for feedback for talks and posters from myself and my peers. **I expect** students to make time (a week before the conference) to practice a somewhat polished presentation in front of myself and peers, and I will work hard with students to make sure you have a high-quality presentation. Graduate students are expected to present at conferences (internal and external), and undergraduates are encouraged to do so.

Organization and data management:

We should all be organized and have good data management skills. All data and protocols should be recorded in lab books (for benchwork), or datasheets (for field or lab work) and kept organized in binders in the lab. All data put into computer files must be kept organized and backed up onto a shared drive (Prior lab drive, or Shared Google drive). Proper data management is highly important and necessary when conducting research with grant money. **Data collected with lab funds or while at Binghamton University should be made available to me and backed up on shared drives. We should all expect to share our data publicly when we publish (which is required by most journals).**

Career preparation:

Students can expect that I'll help students prepare as much as I can for jobs. I'll provide advice, help to make sure students have publications, give advice about networking and help network as much as I can. I will help students seek employment and training for jobs outside of Academia. Research training in the lab and publishing does provide appropriate training for many research (or other) jobs outside of Academia (e.g., consulting companies, government research labs, research at other institutions). **Students can expect me to write letters of recommendation given advance notice.** If it's a sort of letter I've never written before or the first time I've written a letter for students at all, please give me two weeks' lead time. After I have written a letter, a week's lead time is sufficient to ask me to send another (I will tailor the letter I already wrote). I'll be on the lookout for opportunities and send them to students.

Feedback:

Students can expect me to ask for your honest feedback about the lab, their graduate experience, and their perception of me as a mentor. Students can expect me to give them my honest feedback about their progress. I am here to support students in every way possible, and giving feedback is one of the most important ways to promote success. Input from your mentor is essential – it's often honest feedback that others are not willing to give you. Students can expect me to listen to concerns and help solve problems. Students can expect me to work as hard toward their success as they do. The harder students push, the harder I will push to help them.

Literature:

We should all strive to keep updated on ecology literature that is relevant to our research, but also ecology in general. Subscribe to Science, Nature, PNAS, Ecology, Ecology Letters, Journal of Ecology, Journal of Animal Ecology, Biological Invasions, etc. We'll share papers and talk about new exciting work in lab meetings.