

# You want to go to grad school?

First, the most important part of graduate school is to find an advisor that you can work with. Your advisor should obviously be working in an area of science that you are interested in, but also should be someone that you don't mind working with 60+ hr per week for the next 2 years for a MS or 4-5 years for a Ph.D. If you don't get along well with your advisor, grad school can be completely miserable. Besides finding an advisor with an interest and personality that you like, here are some other things to think about:

1) Be sure you find an advisor that is publishing as this indicates productivity and you will need publications to obtain a position in science after graduation. You want to work in active labs that conduct exciting research.

2) Do not be afraid to expand into new subject areas or to learn new techniques. Keep an open mind and inquire about what fields and skills will be in demand in the future when you graduate.

3) You will want the flexibility to develop your own research projects. Be sure to inquire about how much latitude you will have to do so.

4) Contact other graduate students in the lab you want to work in and others at the university to get a feeling for what life in the program and in the community will be like. If at all possible, meet with the potential advisor in person. This gives you a chance to judge for yourself if the graduate program is right for you. It also allows you to evaluate the university and community too.

5) Be sure to inquire about funding for both the academic year and the summer. Find out what is expected in return for funding you (teaching labs, conducting research, mentoring undergraduate researchers, etc.) and if you will have funding throughout your degree.

6) Apply to multiple programs. Sometimes, an advisor may want you and the fit is good, but there is just no money. In other words, don't put all your eggs in one basket.

# Are you a good candidate for research in the PhytoLab?

I am always seeking excellent graduate students to work in my lab. Many students that complete undergraduate degrees are smart. To be successful as a graduate student, you need to be smart, but also hard-working, highly-motivated, and able to work independently. Equally importantly, I want students that have these characteristics but also get along with everyone in the lab. We work hard and assist each other with our projects. Samples from one project may be used in another. Teamwork and collegiality are essential for success in the lab.

We have funding for some projects or, you may wish to develop your own. You should select a research topic that a) interests you since you will be working on it for countless hours, b) is within my area of expertise so I can advise you, and c) is logistically and financially feasible. Contact me if you have any questions.

## **Contact Information**

## **Expectations for Graduate Students in the PhD Program** *(adapted from Anna Armitage)*

### **What do I expect from you as a graduate student?**

1. As a Ph.D. student, you should spend much of your first year reading literature to develop your research questions. You should synthesize the current state of knowledge in your field and formulate relevant research objectives. The ability to independently identify interesting research questions is a critical skill that Ph.D. recipients should have developed by the end of their graduate program.
2. You should complete your dissertation proposal by the end of your third semester. This means that you will provide a first draft of your proposal by the *start* of your second year, and we will spend some time reviewing and editing drafts several times before giving the proposal to your committee.
3. You will need to select a committee no later than the midpoint of your second semester, preferably earlier, and hold regular committee meetings (1-2x/year), even prior to writing your proposal. At your first committee meeting, you will present an outline of your research plan to the committee to get early guidance. Failure to progress along these general lines may result in the loss of funding support.

### **More general expectations of graduate students:**

1. Students should be independent and attempt problem solving on their own at first. I'm always there to help, and my door is always open, but students should have at least thought the problem through and come up with potential solutions before coming to me.
2. Students *must* make graduate school a top priority. School isn't the only priority – have a life too! But grad studies take a lot of time and most of your mental energy. Your project should be the first thing you think about when you wake up and the last thing you think about before going to sleep. You know you're a graduate student if guilt is an inherent feature of relaxation.
3. Students need to be team players. Help out with other students' projects, and they'll pay you back in kind. Collegiality is an essential feature of contemporary research.
4. You must learn to develop new ideas, investigate different ways to answer questions, innovate, and become creative scientists.
5. Take writing seriously. A Ph.D. should produce at least 3-4 publishable, peer-reviewed articles from their dissertation. This goal must be constantly be your focal point.
6. Starting *no later* than their second year of study, Ph.D. students should write research proposals in an effort to acquire fellowships to subsidize research, living, and tuition expenses.

### **What should you expect from me?**

1. You should expect that the doors to communication will be open. I will read proposals and paper drafts when given a reasonable amount of time to do so. I will help plan and design experiments and field studies. I will help you come up with diplomatic solutions when issues arise.
2. You should expect a reasonable amount of financial and logistical support (but funding availability is highly variable!).

3. You should expect me to be fairly hands-off on a day-to-day basis, but I am available for discussions at any time.