



### Step 1: Do you need to go?

• Think deeply about why you might want/need to go to grad school. Do the jobs you are interested in require it? Check out jobs webpages for requirements

• Talk to trusted professors, advisors & mentors about process, outcomes & requirements

• Read about the process & what you will gain from it – "The professor is in" "Getting what you came for"



### Useful Websites For Ecology and Evolutionary Biology Majors

Eco Jobswww.ecojobs.cEcology Society of Americawww.esa.org/Environmental Careers Organizationwww.eco.org/Science Careerswww.sciencecScience Jobswww.sciencecLife Science Alleywww.lifescienceBioCareerswww.biocareeHire Biowww.hirebio.coBiology Jobswww.biologyjo

www.ecojobs.com/index.php www.esa.org/ www.eco.org/ www.sciencecareers.sciencemag.org/ www.sciencejobs.com/ www.lifesciencealley.org/ www.biocareers.com www.hirebio.com www.biologyjobs.com



### Step 2: What do I need to do while an undergrad?

- Work in a lab to gain experience present your work learn the basics of research & science communication
- Find a mentor (grad student and faculty)
- Line up letter writers who know you well & ask them if they could write a strong letter of support for your application
- Take the GRE (most programs still require it)
- Find a general area that interests you to start narrowing down list of potential advisors

• Write a science-focused resume/CV and written narrative of why you want to go to grad school and list your short- and long-term goals

### **Science Resumes**

Science Resume/CV includes info such as expected date of graduation, scientific goals statement, science related jobs/volunteering experience, relevant science coursework, leadership experience, projects you worked on in labs, any publications & honors received





## Step 3: Identify an advisor & lab where you would like to work



• The fall before you want to start grad school (yes, a year in advance), identify the subject area you are most interested in (read papers, check out websites)

Narrow the list of potential advisors and send out a friendly inquiry emails saying you are interested in their lab and want to talk more about joining it as a grad student – send CV and goals statement if they show interest
Correspond with the potential mentor (email, phone, skype, in person),

discuss writing an NSF Graduate Research Fellowship or other Fellowship opportunities at the University

• Email current and past lab members to learn about the mentoring style of the potential mentor, lab & grad student culture, life in the town, etc.





### Step 4: Apply to graduate school\*

if invited, GO!

Apply to a program - you apply to work with a person, not a school - but you apply to the school and Dept. where that person is located. Narrow the list to 5-6 labs as there are fees to apply to most schools, deadlines for fall start date are usually between Nov-Jan before the start date in Aug/Sept.
Many schools will have graduate recruitment weekends where they invite potential candidates to visit as a group to learn more about the Dept., meet with faculty and grad students and talk in depth with the potential mentor -

• Decisions and offers are usually emailed by March/April (15 April last day) Most schools have signed an agreement that they will not require applicants to make a decision about financial support (fellowship, etc.) before April 15 (http://cgsnet.org/april-15-resolution). Not all graduate admissions know this, and may pressure students to respond earlier than that. Look up whether their institution has signed the agreement.

\* This is an EEB model. Other departments have different models that may not work like this. For example, some programs offer non-thesis Master's programs that are course-work only and do not require a specific mentor. Read the department webpage to see the types of degree plans offered.

### **\$\$** Matters

You should not have to pay to attend graduate school! Ask the potential advisor about graduate teaching assistantships (GTA's) and graduate research fellowships (GRA's) which will pay you a salary to either teach (GTA) or do research (GRA). Ask about health insurance, tuition and fees and other fees at the university. Get the salary and length of support info in writing (email is ok); this should come in an offer email but if not politely ask for clarification in an email.



# **Questions to Ask**

## For The Current Graduate Students

1. Do you have resources (equipment, funds, time, research sites) needed to be successful scientifically?

2. Is the stipend adequate for cost of living (housing, food) in the location of the school?

3. Is health insurance covered?

4. What is the quality of mental health services offered on campus to grad students? Graduate school is a stressful time and graduate students often suffer depression.

5. Is support guaranteed? What about fees?

6. Should students expect to TA every semester or are there semesters/quarters covered to allow them to work on their dissertation?

7. How are the graduate students treated by faculty members?

8. Do you feel you are being adequately trained for the career you are choosing (which may not be academia)?

9. Is there good diversity (on many metrics: gender, ethnicities, social background) in the faculty and the graduate student community? How is diversity fostered?

10. What is the atmosphere like between graduate students and research groups?

11. Are graduate students proud of the group/department/school they are working with?

11. In general, are the graduate students satisfied working with their research advisers?

12. Are graduate students satisfied with their work / life balance?

13. What is the academic/social environment like?

14. Do the faculty and department encourage students to apply for outside funding/fellowships (GRFP, NIH, etc)? Do they require a teaching assistantship (TA)?

## For a Graduate Student in the Group You're Interested In

1. What is your adviser's communication style?

2. How frequently is your adviser available to meet with you? How often do they want to meet?

3. Have you ever had to resolve a conflict with him/her? How was it handled?

4. When you have a question related to your research, how does your adviser respond? Do they direct you to the literature, give direct feedback, etc?

5. When writing, what is the level of feedback you receive? Multiple drafts with exhaustive corrections, a few drafts with suggestions, etc?

6. Is your advisor helping you prepare for your desired career?

7. Does the lab hold lab meetings? What are these like (reading group, practice talks, invited speakers, professional development)?

8. Does the adviser help students network with other professionals (e.g. visiting scholars or potential PhD/post-doc advisers at meetings)?

9. How much do lab members interact with each other? How much support (e.g. editing manuscripts, listening to practice talks, joint field work) and collaboration (e.g. co-authorship on papers) occurs within the lab?

10. Is your adviser tenured? Are they likely to move to another institution in the next 5-8 years? Would you be willing to move to another institution to continue working with your adviser?





## **More Questions to Ask**



### For The Graduate Department

Are graduate students encouraged to attend conferences? If so, who funds the travel?
 How frequently do students publish papers?

3. Is the graduate student population diverse? Are there varying political, social, economic, etc views represented and respected?

4. Are there graduate student organizations in the Dept. and on campus (Graduate Student Senate, etc)?5. What kind of professional organizations have chapters in the area??

6. Do graduate students have free access to athletic and other university facilities?

7. What kinds of professional development opportunities are available for graduate students in the department?

8. How common is it for graduate students to collaborate with other students, professors, and post-docs outside of their own laboratory?

9. How many post-docs, visiting students, visiting scholars, and seminar speakers does the department host at a time? Do graduate students usually mingle with people outside of their lab?10. What are the Departments expectations for successful progress towards degree?

### For Everyone

1. Have there been any major changes to the department in the past 5-10 years that have affected graduate students?

2. Are graduate students able to use labs and instrumentation freely?

3. Is it common for graduate students to participate in professional development and/or internships during their PhD?

4. What's the cost of living in the city? Is it easy to get around? Is there public transportation? Is the neighborhood near campus fairly safe?

5. Are you happy with your decision to be here?

6. Is the city a good place for young, single students? How about for raising/starting a family?7. What is the current size of the department? Will it be growing, shrinking, or remaining the same? What proportion of faculty are new (pre-tenure) vs. on the verge of retirement?

