

# EEB Undergraduate Mentee Guide

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**Congratulations**—you’ve been matched with an EEB Graduate Mentor! Not sure what to do next? Refer to this guide to get started! Plus, we’ve included lots of extra information on research, internship, and job opportunities as well as tips on applying for positions. You don’t have to read this guide all at once—this resource is available to you anytime for your reference. If you have any questions, get in touch with us at [eebmentoring@gmail.com](mailto:eebmentoring@gmail.com).

## Meeting with Your Mentor

*(Adapted from Letters to a Pre-Scientist)*

**Set up regular meeting times throughout the semester; try to meet at least 4 times per semester, or as it fits with your schedule and work.**

You can meet via Zoom, over coffee, in the park—whatever works best for you! By meeting with your mentor regularly, you can develop a meaningful relationship with your mentor and they can better support you in pursuing your goals and objectives.

**Unsure of what to talk about? Consider using a “theme” for each of your mentoring sessions to help guide your conversations.**

What you put into your mentoring relationship is what you get out of it. What areas of science are you interested in? Do you have plans once you graduate? Are you feeling nervous about what happens once you finish with your undergraduate? Take some time to reflect on your goals for the short- and long-term, and what kind of questions or uncertainties you have—this is where your mentor can help you.

### **Mentoring Session 1: STEM Career Pathways**

For your first mentoring session, take some time to introduce yourself! Feel free to share information like where you are from, why you decided to pursue an undergraduate degree in EEB, what science topics you like (or don’t like!), what year you are in (freshman, sophomore, junior, senior), some of your hobbies—whatever you want! And, don’t forget to ask your mentor about who they are and what they do! If you’re feeling stuck and not quite sure which questions you should ask, here are some suggestions:

1. Where do you do your research? Are you mainly based in the lab, in the field, or do you use a computer to do your research? Do you travel frequently?
2. What does a typical day for you look like? Do you work by yourself, or with lots of other people? Is your work the same from day-to-day or does it change a lot throughout the year?
3. What type of science do you research in EEB? Are you more focused on ecology or evolutionary biology—or do you study a more interdisciplinary topic?
4. What kind of research questions guide your research? What's the “big picture” of your research? What are you hoping to accomplish in the long-term?
5. What's something unexpected about your research that most people wouldn't know about?
6. What's the best part or most exciting part about your research? And, what's the worst part (or work that you like doing the least)?
7. Beyond your research, what else do graduate students do? Do you teach or take any classes?
8. What's it like being in the EEB program?
9. Outside of research, what do you like to do for fun? Hobbies? Sports?

## **Mentoring Session 2: Higher Education Journeys**

Everyone's journey to graduate school is different. Some folks decided to take time off between their undergraduate degree before pursuing graduate school—others go directly from undergraduate to PhD program! And others may spend years working in industry jobs before deciding to return to graduate school. There's no *right* path when it comes to higher education, so ask your mentor to share some of their experience with you! Here are some questions to get you started:

1. What did you study during your undergraduate and why? Is it different or the same from what you are studying now?
2. What did you do when you finished your undergraduate degree?
3. When did you start thinking about graduate school? What were some of the first steps in your search for graduate advisors and graduate programs?
4. How did you decide where to apply, or who to work with? What were some of your limiting factors?
5. Were you excited, anxious, worried, etc. before you started graduate school?
6. What are some of the common requirements for graduate school programs?
7. How has your graduate school experience compared to what you thought it was going to be—were your expectations similar or different from reality?
8. During this process of going from undergraduate to graduate, did you ever feel like you didn't fit it or that you didn't belong? How did you react to those feelings and how did you overcome those situations?
9. Do you have more than one degree or did you attend multiple institutions of higher education? Did you know you wanted to pursue graduate school when you began your college journey? If not, how did you decide it was right for you?

10. What kind of opportunities did you experience during your higher education journey? How have they impacted you and where you are now?

### **Mentoring Session 3: Overcoming Obstacles**

Let's face it—the real world is tough! Everyone faces unique professional and personal obstacles; the challenges that you face may or may not be the same ones that your mentor has faced. Some obstacles are deeply personal, and may be stories or topics you are or aren't comfortable sharing. That's totally fine! This session is for you and your mentor to share and discuss the tough parts of academia (and life!) and how to overcome challenges. Just know that you aren't alone—everyone has and will face obstacles. Being vulnerable and identifying commonalities can deepen relationships. Here are some questions that both you and your mentor can discuss:

1. What's an obstacle that you faced during the COVID-19 pandemic? Did you develop or find any strategies that helped you navigate this tough time? What did you learn about yourself in the process?
2. What's a critical moment during which you realized that a challenge you thought was previously impossible was actually surmountable. What changed about your mindset or approach that helped you realize that you could overcome the obstacle? What happened?
3. Have you experienced a situation in which you eventually became comfortable that at first you felt like you didn't belong, or with people you thought wouldn't accept you? How did you feel, what happened to allow you to overcome those feelings?
4. Do you think it's important to be able to persevere in the face of hurdles? Why? Is it ever better to not conquer a hurdle and just walk away from it? If so, how do you know when to push forward and keep trying, and when to step back and move on?
5. Reflect on your time as an undergraduate student. What aspect(s) of your undergrad (and about what will happen after your undergraduate career) were or are you most afraid or worried about? Was your worry justified? How did you manage your worries? What did you learn about yourself?
6. Tell a story of the most difficult thing you've ever accomplished. What made it so difficult, and how did you change or grow as a result?

### **Mentoring Session 4: Reflect and Inspire**

Now that you've had three sessions with your mentor, you should have a good idea of who your mentor is and conversely, your mentor should also feel like they know you pretty well! This fourth session should be flexible; as always, feel free to discuss whatever you want. But, if you need some extra structure to your mentor meetings, take this session to discuss some of your bigger career and life questions. What's next for you? Are you feeling unsure about the future or if graduate school is the right choice for you? These are the kinds of questions that you should explore with your mentor. Sometimes it helps to just talk about these questions; some mentees find it useful to talk more concretely about their short-term goals in the next 5 years. Whatever you need, whether you need someone to act as a sounding board for your career ideas or someone to help

you prioritize your goals and make a roadmap for your career, make this session about you! Here are some additional questions to guide this session:

1. What's something interesting or unexpected that you've learned about your mentor? And, what has your mentor learned about you that they find to be really cool?
2. What kind of knowledge or advice have you learned from your mentor? What will you do with that new knowledge?
3. What is some professional or personal advice or words of wisdom that your mentor can share with you that would translate to your place in life right now?
4. What does your mentor do to show yourself respect and care? How does practicing self-love help you succeed in your career?
5. What's a mantra or positive affirmation that your mentor uses when they are feeling down or discouraged? How does it help them improve their attitude and mindset?

## Opportunities and Resources

During the school year or over summer breaks:

- Work for a professor doing lab work, research in the library, or fieldwork
- Doing research may also require funding—and learning to write grants is a great skill! Here's a list of [external funding sources](#) for research
- Check out UTK's [Undergraduate Research & Fellowships](#), which funds undergraduate research year-round, offers topical workshops, and coordinates campus-wide exhibitions—or check out UTK's [Discovery Day](#) to meet other UTK undergraduate researchers and how to get involved with research
- Look into research opportunities in the [Department of Ecology & Evolutionary Biology](#), where projects often focus on the evolution and maintenance of biodiversity as well as the future of biodiversity; check out [EEB faculty profiles](#) to find a professor whose research projects overlap with your research interests
- Seek out [Research Experiences for Undergraduates \(REU\)](#) at institutions and field stations funded by the National Science Foundation
- Present your research as a poster or presentation at a professional conference (ask your professors or mentors for recommendations!). Conferences are fantastic opportunities to get exposed to many researchers and research projects—and, conferences are excellent avenues for networking!
- Work as a teaching or lab assistant for a biology or ecology course
- Spend a summer at a field station! The [Organization of Biological Field Stations](#) is a good place to search for opportunities
- Get a summer or part-time job with a park, government agency, or nature center, or even a zoo! Look around locally; for example, [Zoo Knoxville](#) offers great volunteer training and opportunities to do a variety of work and outreach. Or, if you are interested in restoration ecology and invasive plants, the [Native Plant Rescue Squad](#) has volunteer opportunities year-round

- The [Student Conservation Association](#) matches students and volunteer opportunities with government and private agencies
- [Pathways to Science](#) provides links to programs and professional development resources for current and prospective undergraduate students, including research experiences for undergraduates, scholarships, and travel and research opportunities
- Get a work/study experience with any one of a number of federal natural resource agencies ([Forest Service](#), [Bureau of Land Management](#), [Fish and Wildlife Service](#), [National Park Service](#)).
- [AmeriCorps](#), [AmeriCorps NCCC](#), [American Conservation Experience](#), and related programs (such as [Kupu](#) in Hawai'i) offer excellent conservation-focused job opportunities that also provide an education award upon completion!
- Be open when applying to positions—oftentimes, you might end up doing work that isn't necessarily what you want to do (like washing glassware, gathering dung beetles, etc.). Even though these experiences and skill sets may not be exactly what you want, they will help you grow and become a more well-rounded scientist! Plus, you never know until you try, right? Be flexible!
- If you do receive a research or volunteer position in a lab for an extended period, check if you are eligible for co-authorship on projects that are coming out of the lab in which you played a key role (this is a question to discuss with your professor or PI). Contributing to a peer-reviewed manuscript gives you the chance to hone your writing skills. Plus, having a peer-reviewed publication on your CV is a great asset to have when applying to graduate school! Or, if you are working more independently in a lab, discuss with your professor or PI about getting credit for your research and the opportunity to develop an independent study project where you can develop and test your own ideas and hypotheses

## Jobs and Internships

See the links below for Job Boards that advertise positions related to ecology, conservation, and evolutionary biology:

- [AAAS Science Careers](#)
- [AmeriCorps](#)
- [AmeriCorps NCCC](#)
- [American Conservation Experience](#)
- [BirdLife International](#)
- [Bureau of Land Management](#)
- [Conservation Career Compass \(HI\)](#)
- [Conservation Connections \(HI\)](#)
- [Conservation Job Board](#)
- [Ecological Society of America Job Board](#)
- [ECOLOG-L Ecological Society of America Listserv](#)
- [Environmental Career Opportunities](#)
- [Fish and Wildlife Service](#)

- [Forest Service](#)
- [Government Jobs](#)
- [Kupu](#)
- [National Park Service](#)
- [Oak Ridge National Laboratory](#)
- [Organization of Biological Field Stations](#)
- [Ornithology Exchange Job Board](#)
- [Royal Society for the Protection of Birds](#)
- [Society for Conservation Biology Jobs Board](#)
- [Society for the Study of Evolution Career Opportunities](#)
- [Student Conservation Association](#)
- [Texas A&M Department of Wildlife and Fisheries Sciences Job Board](#)
- [The Wildlife Society Career Center](#)
- [USAJOBS](#)
- [U.S. Fish and Wildlife Service Careers in Conservation](#)

## Additional Job and Internship Resources

- [Baskett Lab Sources for Jobs, Career Advice, Grants, and More!](#)
- [Job Market Advice \(Twitter Thread from Dr. Cindy Veldhuis/Columbia Academic Job Market Bootcamp\)](#)
- [Pathways to Science for Undergraduate Students](#) (Programs and professional development resources for current and prospective undergraduate students–research experiences for undergraduates [REU], scholarships, and travel and research opportunities)
- [Princeton Grad School Search](#)
- [Twitter Thread: Job Search Engines for the Academic Job Market](#)
- [Various Resources Related to Academic Writing](#)
- [Where Do You Look for Academic Jobs in Ecology?](#)

## Tips for Applying to Jobs and Internships

### Personal Statements or Cover Letter

- Be honest, concise, and creative–make your application true to yourself!
- Find something to make your application really stand out; think about how you can illustrate experiences that show your grit, passion, or knowledge
- Proofread multiple times (reading out loud helps to make sure that your writing sounds natural–and sounds like you!) and ask others to proofread your work
- If you’re interested in that area of research, give reasons why; take some time to read peer-reviewed papers in the research areas that you are interested in. If you don’t know

much about that area of research, say why it will be helpful to you or why you want to explore it (and why you'd be a great candidate!)

- Even though you may not know all of your career goals, be clear about your short-term goals (like skills that you'd like to learn, knowledge that you'd like to gain, experiences that you want to have in order to help you along your career trajectory)
- Describe your strengths or how you fit into the program or job; briefly describe your relevant background, knowledge, and experience
- Ask friends or your mentor to see examples of their applications, personal statements, or cover letters
- Apply for many programs—internships, research positions, and job opportunities are often competitive and only a few applicants receive the positions for which they apply. But, if you apply for several programs, make sure to tailor each application to the program (that is, make sure that you are addressing the correct person for each application and that your personal statement directly relates to the specific job for which you are applying)
- Draw keywords and key phrases from the job application advertisement/description to use in your statement
- Be confident: instead of saying, “*I hope to...*”, say “*I will do...*”
- A cover letter may or may not be part of your application, but if you do use one, try to only limit your cover letter to a page—use space wisely
- Offer to answer follow-up questions by phone or email
- Make sure that you read all the instructions when applying for positions; often times, employers, professors, and supervisors will specifically describe what documents are required, what format that these documents need to be in (i.e., all merged into one pdf), who to send these documents to, and deadlines. Read all the details!

## CV/Résumé

- CV (Curriculum Vitae): this is a longer, more-detailed document typically for academic and research positions and lists all the jobs, experiences, awards, etc. that you've completed up to this point ([here's a good resource on how to put a CV together](#))
- Résumé: this is a shorter (1-2 page) document that is more tailored for each job, lists relevant experience, education, and skills (but not everything that you have ever done) ([here's a link to lots of resources about putting together an ecology-focused resume](#))
- Need extra help? Request an appointment with the [UTK Career Center](#)
- Make sure your formatting is correct (all tabs are aligned, bold/italics are consistent, numbers of bullet points are consistent)
- Use an active voice (rather than a passive voice) in your writing
- Use present tense for jobs that you are still in and past tense for jobs that you've completed
- When putting your personal statement or cover letter together, you should also review and update your CV. Tip: at the end of each semester, update your CV!

- Anytime you send an email to a professor asking if they have space in their lab for you to join or volunteer (or if you're contacting a supervisor or PI on a research project), attach your CV so they can quickly check your skills and experiences to determine if you are initially qualified to work in their lab or at least have some relevant experience
- If the application process is formal (an online process where you upload multiple documents), search to find and contact someone who has already gotten the job and ask them for recommendations when filling out the application. If it is informal (e.g., "Contact Jane Doe to apply"), write a cover letter to accompany your CV
- If you are applying for a graduate program or to do research/work in an on-campus lab, use the lab website to learn more about graduate students in the lab. Take the time to email these graduate students and ask them about the lab environment and expectations. This is an integral step in searching for research opportunities. You want to make sure that you will be a good fit for the lab, but—more importantly—that you'll feel comfortable and supported in the lab environment

## Letters of Recommendation

- Suggestions for good letter writers include professors (who know you well, or from classes where you performed well), supervisors from previous jobs, or even your mentor! Ask someone who knows you well and can speak to your skill sets
- Ask early and remind often—ask your letter writers at least a month before letters are due. Give them plenty of time to write your letter; in addition, be sure to give them a copy or link to the position for which you are applying
- If you know someone that you will likely ask to write a letter for you in the future, reach out to them early and ask them to draft a general letter of recommendation now

## Resources to Ensure Safe, Inclusive Conditions in the Field and in the Lab

- [Doing Fieldwork in a Pandemic](#)
- [Field Operations Safety Manual](#)
- [Field Research: A Graduate Student's Guide](#)
- [Field Secrets: A Field Guide to Living in the Field](#)
- [Mental Health in the Field](#)
- [Recreating Wakanda by Promoting Black Excellence in Ecology and Evolution](#)
- [Safe Fieldwork Strategies for At-Risk Individuals, Their Supervisors and Institutions](#)
- [Safety and Belonging in the Field: A Checklist for Educators](#)
- [Safety Guidelines for Fieldwork](#)
- [Security Guidelines for Field Research in Complex, Remote and Hazardous Places](#)
- [Ten Steps to Protect BIPOC Scholars in the Field](#)



## Resources Documenting Harassment and Discrimination in the Field and in the Lab

- [Academic Sexual Misconduct Database](#)
- [Birding While Black](#)
- [Environmental Experiences Have Racial Roots](#)
- [Harassment, a Field Study](#)
- [Scientists Push Against Barriers to Diversity in the Field Sciences](#)
- [Sexual Harassment is Common in Scientific Fieldwork](#)
- [Signaling Safety: Characterizing Fieldwork Experiences and Their Implications for Career Trajectories](#)
- [Study Digs into Sexual Harassment During Fieldwork](#)
- [Survey of Academic Field Experiences \(SAFE\): Trainees Report Harassment and Assault](#)
- [Women Scientists Sexually Harassed While Doing Fieldwork](#)

## Addressing Harassment, Discrimination, and other Negative and/or Hurtful Interactions

- When taking on a new job, know what policies, processes, and protections are in place regarding sexual harassment, discrimination, unsafe working conditions, bullying, and/or other hurtful/negative interactions. Get copies of these materials; these are just as important as a copy of your contract, so hold on to these and make sure that you have them handy. Request that your supervisor goes specifically over information related to Human Resources (HR) and what resources and services are available.
- If someone harasses you, you must respond. Although difficult, be strong and commit these lines to memory: “Do not talk to me like that; your language is inappropriate” and “Do not touch me; your touch is unwanted.” In the case of an investigation or other inquiry pursuant to harassment, you will be asked if you made it known to the perpetrator that you were not comfortable or that the perpetrator knew that what they did was inappropriate.
- When harassment occurs, document it. Document everything. In the event that an investigation arises in association with a sexual harassment claim, you will absolutely need evidence. If something happens, write it down immediately. Jot it down in an email to yourself and note the date, time, exact quotes (if possible), and the names of any other people that were present during the incident (you might need to contact them in the future to corroborate your own claim). Or, if you receive an email, text, phone voicemail, or other communication from the perpetrator, keep it. Moreover, if you have repeat incidents of sexual harassment (e.g., a colleague continually makes inappropriate, sexual comments to you) from a specific person, record these conversations and comments.
- Report your claims and follow-up with the appropriate chain-of-command. Stick with it. Find the courage and bravery within yourself to face these uncomfortable situations.

Demand what is yours: closure, safety, justice. You name it. It's yours—claim it. For more information, click [here](#).

- For additional resources, consult [The Fieldwork Initiative](#) and [In the Field](#) from ADVANCEGeo.

*\*If you are facing any form of trauma, violence, or don't feel safe while in the field or anywhere else, get yourself to a safe place as soon as possible. If that is not possible, complete this [form](#) via The Fieldwork Initiative so they can help you.*