

Mentoring Philosophy

Mentoring Context: We need research and Extension leaders capable of addressing the environmental impacts of rapid urbanization and who are trained in developing creative solutions to transform these landscapes into thriving ecosystems that support native biodiversity and critical ecological functions. I work with my postdoctoral, graduate, and undergraduate mentees to ensure that they can grow into these leaders. One of my prior mentors said something to me that really stuck. He said, “ecologists are great at finding problems.” He is right. While finding these problems are critical, a central goal of my lab’s work is to instead find solutions. I rely on the below mentoring principles (in no particular order of importance) to help my mentees grow into solution finding leaders. I have been very fortunate to have incredible mentors throughout my career who inspired me to push further than I ever imagined I could. I owe my success to all of them. I hope to inspire my mentees in the same way as my mentors have inspired me.

Mentoring Principles

Get to know what mentees want: Not everyone wants to pursue a Ph.D. or work in academia. That is completely fine, and in fact great because we need leaders in many other sectors of society to make real-world change. I work with mentees as early as possible to get to know their career goals so that I can provide the opportunities for them to attain the skills required to meet those goals

Help me help you: I want to be the best mentor possible. For this reason, I ask mentees to periodically evaluate me. It seems fair since I must evaluate them. Evaluations are uncomfortable but are useful, particularly when someone who wants to see you succeed is doing the evaluation. In addition, I want my mentees to let me know when they need help. It is great to figure things out on your own, but sometimes, we all need help.

Mentees learn best by doing. Go do it! I advise my mentees to not wait for me to tell them to do something. If they see an opportunity that they think will benefit them, then pursue it. I am happy to discuss if they have time for commitments or help them to pursue the opportunity successfully, but I want my mentees to take initiative, get out there, find these opportunities, and go after them. Similarly, I advise mentees to not wait for me to seek help when they need it. UF has so many talented people who are dedicated to education, research, and extension. I want my mentees to knock on doors to get the answers they seek. And then I request that they educate me on what they have learned. One of my greatest joys of mentoring is that I learn from my mentees.

Communicate your work to all who want to listen: I push my mentees to present as frequently as possible. This helps them to grow into confident public speakers and communicators, a skill necessary for whatever career path they chose.

Media coverage/press releases: I advise students to get their work out there for the world to see. Use media platforms, blogs, and even contact UF’s communications staff. If you want to have a real-world impact, this is a good way to start.

Engaging in multiple forms of scientific communication: Public trust of science is low. We may not feel that it is our job to communicate science to the public, but it certainly does not hurt. As researchers, we need to be able to communicate our work to multiple types of audiences, ranging from scientists and non-academic partners to the public. How you prepare a talk, paper, etc. is going to depend on your target audience. I help mentees to meet this communication challenge by recommending they write outreach documents and give talks to audiences other than scientists, e.g., k-12 students, the public, project partners. Communicating your work beyond scientists helps to increase the real-world impact of research, and increases public support for, and interests in, science.

Teamwork: Environmental problems are increasingly challenging. In my opinion, the days of being the lone researcher on a topic are ending, and possibly may have never existed in the context of urban ecology. This is because urban ecology incorporates ecological, social, and economic factors. Thus, much of the work my lab does requires teams. I advise mentees on how to be good team members, e.g., get tasks done on time, communicate if you are running behind schedule, be a good listener to hear what teammates are saying. Team work also pays off as it helps mentees to increase the number of publications and talks.

Diversity: I aim to bring in mentees that have different backgrounds, interests, perspectives, lifestyles, and skillsets. Regarding skillsets, having a diversity of skills among my lab members helps to facilitate collaborations and teamwork. Regarding backgrounds, interests, perspectives, and lifestyles, diversity in these aspects just make our group more well-rounded and increases understanding and acceptance among lab members.

Embrace interdisciplinary thinking and cross-disciplinary collaboration: Given that urban ecology emerges from complex social, economic, and environmental interactions, I feel it is necessary for mentees to embrace interdisciplinary thinking by incorporating socioeconomic dimensions into their research and grant proposals. The degree of this incorporation will vary depending on the interests of the mentee. But this is where networking is useful. Get to know the social scientists, the economists, policy experts, etc. and figure out how to incorporate topics affecting urban ecosystems into your work, even if it is just strong reflection of these topics in the introduction and discussion of your papers and talks. This interdisciplinary approach also increases the number of people that will want to read your work.

Mentor: I urge my mentees to seize the opportunity to be a mentor to less-senior researchers. Doing so ensures that our lab provides the service of undergraduate research training. Mentees can do this by managing undergraduate researchers, mentoring on undergraduate research theses, and/or working with undergraduate volunteers. By having my mentees learn to mentor others as early as possible in their careers helps them to learn that no one style of mentorship fits all, a reality that once accepted can help them to grow into more competent leaders.

Seek funding and awards: Having to pursue funding is just a reality. Rather than having mentees write proposals for their committees to read and to make their committees happy (which is necessary), I would rather turn that proposal into funding. Even small grants of a few thousand dollars are a huge help to the collective lab effort. One can never start too soon with proposal

writing and with learning to communicate how your work meets the need of a funding agency. Regarding awards, do not be shy, pursue them. Awards are a great way for mentees to reaffirm the importance of the great work they are doing. I am more than happy to help mentees pursue such awards and I am just as proud of them as they are of themselves (possibly more) when they receive awards. The only guaranteed way to not receive grant funding and awards is not applying for them. Do not be that person.

Bridge the gap between basic and applied research, and then apply findings to the real world: I think of our lab's work as "ecology for the city." That is, we are seeking solutions, e.g., how do we design urban landscapes to simultaneously support native biodiversity and provide the services that humans require. When mentees find information to contribute to that question, I challenge them to think about how to apply that information to practice. Science can end at the publication, but useful science should not. I work with mentees to try to make the professional connections needed to have real-world impact. I think this pursuit is one of my favorite challenges of my position.

Make mistakes: This may be odd, but I fully expect my mentees to make mistakes. We are learning new skills, some of which are quite challenging. That means we are not always going to get things correct. Mentees who never makes mistakes are likely not trying hard enough to advance their understanding. Try new approaches, delve into new topics, and when you make a mistake, reflect on it, learn, and grow.

Friendly competition: I want my mentees to be aware that they are entering a competitive field with limited resources. However, I also want them to know that they should never try to succeed at the intentional expense of others. The people with whom we compete are, or will become, our colleagues. I teach my mentees to always be happy for the success of their colleagues even when they get beat fairly for the same opportunity. Learn from that failure and your colleague's success and use what you learn to push for success next time. In addition, I am also of the mindset that friendly collaborations among researchers with different perspectives aimed at seeking answers will be much more productive and yield long-term benefits more so than some of the entrenched debates that can emerge among research groups.

Work hard and have fun: My Ph.D. advisor said to me during a time when I felt stressed "you are doing something wrong if you are not having fun." After reflecting on that statement, I agree with them. There is absolutely nothing wrong with changing your mind about the answers and career path that you seek. Life is short and for that reason, I hope my students love what they do.

Work life balance: I was recently advised that if I am the best version of myself that I want to be that I should be successful. That advise resonated and I want to mentor so that my lab members pursue their career goals with that mindset. That perspective requires work-life balance. While research and extension are demanding and will require some work on the evenings and weekends, we need to remember to make time for family, friends, and ourselves. I am happy to discuss strategies to achieve this balance with my mentees.