

# McCain Lab Mentoring Agreement

---

The primary purpose of the lab's existence is to conduct research to improve humanity's understanding of the natural world for applicability to ecological theory and broader conservation goals. We are also a community of excellent human beings striving to learn, build our lives and careers, and enjoy the opportunities to pursue the beauties and intricacies of life. Our currencies of output are primarily scientific publications, but also grants, presentations, museum specimens, teaching, artistic expression, and outreach. We strive to build scientific independence and creativity, but also a professional community.

## What I Provide to You:



**I will be committed to supporting the achievement of your educational and career goals.**



**I will incorporate you into an active lab with ongoing and established projects.** I will use my current research and collaborations to serve as a model for how you too can develop as a professional and effective scientist.



**I will strive to be equitable, accessible, encouraging, and respectful.** I will try my best to understand your unique situation, and mentor you accordingly.



**I will help you navigate your graduate program of study.** Together we will determine the best path forward for you in choosing a committee, preparing for qualifying exams, short-term and longer-term goal planning, choosing a research project, and developing hypotheses, data collection, chapters and publications.



**I will facilitate and encourage you to broaden your scientific skillset to be the best scientist you can be.** We will work together on communication skills, lab and field research skills, quantitative methods, and scientific professionalism. We will identify key skills to further your career goals (e.g., GIS, statistics, modelling, programming, molecular techniques, collections management).



**I will be available for regular meetings**—usually weekly as well as in informal conversations.



**I will help you develop strong, effective manuscript and grant writing skills as well as scientific presentation skills.** We will work on these in student-mentor pairs, but also through lab feedback sessions and semesters where lab meetings are dedicated to writing workshops.



**I will provide honest feedback on your dissertation and scientific progress.** I will strive to be constructive and supportive in feedback. This is a crucial, but challenging, role for a mentor. I will strive to be sincere, specific, timely, and offer to help however I can. I will also ask for your honest, constructive feedback on my mentoring and how it can improve for you.



**I will need lead time for providing feedback on manuscripts, grants, talk slides, or providing letters of recommendation.** In most cases, this should be at least a week ahead of a deadline. But expect that the longer an item is—for example a complete manuscript or thesis chapter—the will more time I will need to go through it in detail, think about and articulate pertinent feedback and advice.



**I will listen to your concerns and help you however possible.** One of my strengths is creative problem-solving; take advantage of it.



**I will encourage you to attend scientific meetings every year,** will make an effort to help you fund attendance, and will help you network when I also attend the same meetings.



**I will help you find other resources** and other mentors when you need additional support or skills beyond my abilities or time-limitations.



**I will strive to create a lab community** of collaboration, mutual respect, and appreciation of differences. This should be a safe space for all of us in the lab. If this is ever not the case, bring it to my attention ASAP and it will be dealt with directly and fairly.



**I will be your advocate.** I will write you detailed letters of recommendation, send you job openings and scientific opportunities, and provide feedback on grants and manuscripts even after you graduate.

## What I Expect from You:



**Take ownership over your educational experience.** Acknowledge that you have the primary responsibility for the successful completion of your degree. Understand that you are the creator of your career and the provider of your success. I can aid you along the way, but the motivation and hard work comes from you.



**Develop strong research skills.** Learn how to plan, design, and conduct high quality research. Learn how to document and present your findings. Be honest and ethical. Spend time thinking deeply and broadly. Read the literature—both foundational and recent. Use creative brainstorming, oral presentations, and writing to explore deeper into your ideas, data, and results.



**I expect that you will pursue research that has some overlap with my expertise and interests.** Otherwise, I will not necessarily have the best perspective to guide you successfully. If your interests shift away from the core lab research, I expect that you will inform me and we can discuss options.



**Decide on your desired career trajectory or possible trajectories.** Then develop your research and skills in line with those directions. Seek feedback from various people with informed opinions, especially if those careers are outside of academia. A masters or PhD will help you in any career. To be successful as a future professor you need to love doing science. You only live once, so follow your heart.



**Meet the EBIO degree requirements in a timely manner.** This includes completing (a) preliminary and comprehensive exams; (b) coursework; and (c) the primary research aspects of professional development: research progress, publications, presentations, professional meetings, grants & fellowship proposals



**You will be expected to meet with me regularly** either weekly or bi-monthly depending on your needs and progress through the degree



**You will be expected to seek my advice on issues related to your professional and academic development.** For example, I have valuable experience to help you in choosing committee members, classes, teaching positions, research directions, authorship norms, funding opportunities, appropriate journals, additional mentors, etc. You are not held to my advice, but you are held to considering it seriously.



**You will strive to communicate clearly.** Be specific, sincere, timely, and constructive.







**You will work to set attainable goals and meet deadlines.** We will set goals together every semester (see individualized plans in the sections below). You will also decide upon your personalized guidelines of consequences of not meeting goals or deadlines.









**You will actively pursue research funding.** Not only will this lead to better writing and framing of your research, but it will allow you to do more research and will build your CV.



**Be a team player: participate in lab meetings & lab research activities.** This is your dedicated time and opportunity to soak up as much science and skill as possible, but also to practice building supportive work communities. You will leave the lab spaces clean and organized after use. You will be welcoming and supportive of new members. Since running a lab is a big time-investment, you will aid with lab activities: leading lab meetings, inviting speakers, ordering supplies, preparing field supplies, training research assistants.

-  **You will be expected to participate in peer-to-peer mentorship.** Helping your graduate and undergraduate lab mates with their projects, scientific skill building, and providing constructive, supportive feedback is a crucial role for team-building and community.
-  **Authorship.** You are expected to be first author on all manuscripts from your degree and those you have taken a lead in development and writing. You are expected to publish them in a timely manner. Any collaborators on a project in the lab or outside CU who have made a substantial contribution to at least two aspects of the project (e.g., data collection and writing) should be listed as an author on manuscripts and presentations. If the project involves data collected from my grant funding then I should be the last author. All authors must read and approve of manuscript submissions; ideally presentations as well.
-  **You are expected to attend the departmental seminar and faculty talks.** Meet with visiting speakers that are relevant to your research. These are chances to learn not just about different scientific topics, but to hear about new methods, new data, quantitative analyses, network, and learn effective presentation styles.
-  **You are expected to discuss deviations from regular work hours, sick leave and vacation with me directly.** Establish regular work hours in individual agreements. Consult with me and notify fellow lab members in advance of any planned absences. It should be clear from academic norms and a northern latitude climate that summers are when you get the most research conducted; unlike undergraduate years this is not an extended vacation time.

## Conflict Resolution:

-  Conflict exists in all relationships, so it's not a surprise it will arise in mentoring and in lab relationships. We all make mistakes, we are all individuals with strengths and weaknesses, and we all are continually learning.
-  We will all try to communicate issues promptly with respect and professionalism. Then listen actively.
-  If a problem arises, we will set a face-to-face meeting time for expressing and hearing without blame or criticism. We will prepare and use the four *Non-violent Communication Steps*→
  - Observations (I see...)
  - Feelings (I feel...)
  - Needs (I need...)
  - Requests (Would you be willing to ...)
-  Remember there are multiple valid solutions to any issue; we will brainstorm creative solutions
-  If a problem persists, we will consider inviting a mediator
-  We will seek out additional resources for Conflict Resolution as needed, for example:
  - <https://www.nonviolentcommunication.com/aboutnvc/4partprocess.htm>
  - <https://www.icre.pitt.edu/mentoring/problemsolving.html>

**Now think carefully about these expectations and how we can individually align them with your personality, individual needs, and stage in the degree. What might you have trouble with? Where may you need more guidance? (Fill out attached individual agreements)**

---

This agreement was a collaborative effort based on input from Christy McCain, Chloe Garfinkel, Austin Nash, and Grant Vagle. It draws from multiple online resources, particularly Stacey Smith's *Expectations* document, Trina McMahon's *Mentor-Mentee Contract*, the *EBIO Advising Agreement between Graduate Students and Faculty*, among others.