

Mentoring agreement

PI will contribute to the mentee's professional and personal development and recognizes that the success of this mentoring relationship depends on creating an environment where *honest, frequent, and timely* communication is valued and encouraged. To create and maintain this open line of communication, the mentor and mentee will have weekly in-person meetings. During these meetings, the mentor and mentee will share updates, give and receive feedback, and discuss deadlines and milestones. In addition to these scheduled meetings, the PI will also be available for unscheduled drop-ins or messaging through Slack. The mentor and mentee also have a clear understanding of each other's email preferences and habits. The PI often gets back to mentees within 12 hours or writes them a short email or Slack message letting them know when they can get back to them; the same is expected from the mentee. The mentee will maintain a shared folder on OneDrive that will be used for storing this mentoring agreement, facilitating the editing of documents, and sharing semester meeting notes and timelines.

Much of the PI's mentoring will focus on the mentee's professional development. One of the key professional skills the mentor will help the mentee improve is scientific writing. The PI is committed to providing timely, constructive, and honest feedback on the mentee's scientific writing. Another set of skills that the PI will focus on is data analysis/management/archival skills, computer programming, high performance computing (e.g., using university's super computer), and documenting methodologies. The PI will have one-on-one meetings with the mentee and provide feedback on their data analysis approaches. The frequency of these meetings will vary depending on the analysis and the mentee's familiarity with computational methods.

The PI also recognizes the importance of personnel management and leadership skills, which are rarely taught in graduate school but are important to the mentee's success. One way to help the mentee develop this skill is by including them in field campaigns when possible. Such experiences will not only improve personnel management skills and teamwork but will also help the mentee become well-versed in field methods. Additionally, the PI will encourage the mentee to attend relevant conferences to share findings from the project, which are important for improving public speaking skills and networking which might even lead to cross-institutional collaborations. The mentor will also maintain ongoing discussions with the mentee about different career pathways after graduation, provide letters of recommendation, and assist the mentee in preparing job applications. The PI is also cognizant of the fact that the success of a mentoring relationship is contingent upon creating a safe and inclusive environment for everyone and recognizing that mental and physical well-being is essential for academic success. Lastly, throughout this mentoring relationship, if the PI is not experienced enough to provide quality mentorship on a specific topic, they will put the mentee in touch with colleagues who are qualified on the topic.

The mentee commits to completing the objectives of their project in a timely manner and finishing their Ph.D. in four years. The mentee will attend weekly lab meetings and maintain an open line of communication to discuss progress on the project, seek feedback from the PI and other experts as needed, communicate research needs, and hold the highest ethical standards. At the beginning of each semester, the mentee will develop a set of semester goals and a timeline breaking down tasks in order to achieve those goals. This document will be reviewed by the mentor at the beginning of the semester and adjusted if necessary.

The mentee will lead and prepare manuscript drafts and conference abstracts, presentations, and posters in a timely manner and give the PI enough time to provide thorough feedback. The mentee will disseminate their research findings in at least two peer-reviewed publications with the mentee as the lead author. The mentee also commits to documenting methodologies (e.g., developing git repositories stored on the lab's GitHub repository) and archiving the data. Finally, the mentee needs to meet the requirements of the Ph.D. program and maintain good academic standing, defined as a GPA of 3.5 or higher. Achieving these goals requires taking the initiative and being proactive.

Mentoring agreement evaluation

The primary goals of this agreement are to help the mentee (1) develop academic and professional skills expected by the discipline and (2) successfully achieve the goals of their Ph.D. project. To evaluate the effectiveness of this mentoring plan, the mentor will ask the mentee to write a short report (2-3 pages) towards the end of each Fall and Spring semester and reflect on the progress toward research and career goals, areas of weakness/strength, and how we can improve this mentor/mentee relationship. The PI will revise this Mentoring agreement document regularly.

The department also conducts an annual evaluation of student progress. The student must submit a progress report for their degree program during the Spring semester that includes:

- status with respect to academic milestones, including expected dates for completion
- a compilation of recent research (e.g., manuscripts), dissemination (e.g., conference attendance), and service activity
- a plan of study listing past, ongoing, and future courses for the student's degree

This progress report is evaluated and revised at least once each year until the completion of the degree, and a copy will be placed in the student's permanent file. The faculty of the department reviews the progress report. The Graduate Program Committee (appointed by the department chair) will evaluate the progress reports of all graduate students during January and report to the faculty on student progress and compliance with departmental rules and expectations. A letter describing the evaluation results and recommendations will be provided to each student and their advisor. The student and advisor should meet and discuss the findings, particularly adherence to milestones and the results from the prior year's evaluation.

Mentor

Mentee