

Mentoring in Undergraduate Research

What is mentoring?

The goal of mentoring is professional and personal development. A mentoring relationship is a partnership where the mentor provides guidance for the mentee. The mentor is an experienced individual who shares knowledge, experience and advice with the mentee. Mentoring relationships provide an opportunity for mentees to bring questions, concerns, or problems to someone who listens, supports, informs, and sympathizes without judgment, criticism, advice, or comparison.

In an undergraduate research setting, the focus of mentor and mentee is to accomplish a common task related to a specific research question. A mentor will help a mentee to develop skills related to the discipline. These skills might include technical skills, writing skills, use of specific software, etc. as appropriate for the project and discipline.

Mentoring Expectations

The expectations of mentors and mentees from the mentoring relationship may differ. To avoid frustration in the mentoring relationship, establishing shared, realistic expectations at the beginning of the relationship is a good idea. To get you started, below are some common, reasonable expectations for a mentoring relationship. Discuss these expectations early in your mentoring partnership. You may want to add other expectations the two of you identify.

Common expectations for mentors and mentees:

- Meet regularly and as often as your schedules permit.
- Set an agenda for your meeting in advance.
- Keep any commitments made.
- Maintain confidentiality with one another.
- When you meet, give each other your undivided attention. Turn cell phones off (or, if necessary, discuss reasons it must be left on).
- Show respect and support for each other.
- Work together to resolve any minor concerns about the relationship.
- Provide and be open to feedback. When providing feedback, be honest, yet tactful.
- Plan to be open to trying new things.

Reasonable expectations specific to mentors and mentees:

Mentors	Mentees
Provide help, offer suggestions, and be a sounding board for issues relating to the mentee’s career goals and development. Talk about skills mentee could acquire to add value.	Take initiative to drive the relationship and be responsible for your own career development and planning. Ask questions.
Discuss requesting feedback and help the mentee find information on the impact he or she is having.	Focus on and be interested in getting feedback and measuring how you are perceived.
Provide suggestions and advice on goals and activities that lead to effective and rewarding work. Share stories about the successful paths others have taken in their careers that might be relevant to the mentee.	Ask for suggestions and advice early in the relationship. When advice is given, listen to the mentor, apply at least some of their ideas, and let him or her know the results.
Be a catalyst for the mentee in developing a network. Suggest others who might be engaged.	Elicit the mentor’s advice on developing other informal mentoring or networking relationships.
Evaluate the relationship periodically.	Evaluate the relationship periodically.

Specific expectations in a research setting:

Although many of the aspects of mentoring apply to mentoring in a research setting, there are differences. Since the goal of the partnership is accomplishing tasks related to a specific project, this relationship includes time requirements and performance expectations. Additionally, many meetings between mentor and mentee will be focused on project details. To help provide a framework for the work and promote success in an undergraduate research mentoring relationship, here are a few suggestions:

- Establish clear expectations. This objective can be accomplished by developing a contract or, less formally, by discussing expectations. Some ideas to discuss include:
 - Time requirements
 - Performance expectations
 - Expected fate of the work (publications, presentations, etc.)
 - A detailed plan for the project with specific outcomes
 - Identification of a primary contact. Who will you contact with questions, updates, and concerns? Depending on your institution, this may include the faculty mentor, a postdoctoral associate, a graduate student, or even a more advanced undergraduate researcher.
- Try to meet regularly and as often as possible, even if it is only for a few minutes. Frequent meetings will help to promote communication and prevent surprises.
- Ask for help with procedures if you do not know how to do something.

Tips on finding a research mentor

Working with the right mentor can help you accomplish your goals. But, how do you find a mentor? Here are some steps to get you started:

1. Identify a specific area that interests you. You could begin by chatting with professors whose classes you have enjoyed, by perusing a departmental or university research activities page, or by surveying undergraduate research projects at your campus (sometimes these are celebrated in undergraduate research symposia, through posters displayed in your building, on the website, or other means).
2. Ask for a meeting. Once you have identified one or more potential faculty mentors, reach out to them through a concise introductory email requesting a meeting to talk about undergraduate research opportunities. Be sure to include your name, major, and relevant background, information about what interests you about their work, and what type of position you are searching for (e.g. volunteer, research for credit, a paid internship, etc.).
3. Prepare for the meeting. Read at least one article recently published by the potential faculty member. Identify your reasons for seeking an undergraduate research position. Prepare a copy of your resume or CV to take with you.
4. At the meeting. Meeting with a potential faculty mentor is an opportunity for both of you to become acquainted. The faculty member will want to learn about your experience and reasons for pursuing an undergraduate research position. This is also your opportunity to learn more about the faculty member's expectations for research students.
5. After the meeting. After your meeting, send a thank you message to the potential faculty mentor. If you are still interested in working with the faculty member, be sure to say so. If you decide to work with someone else, let the faculty member know and thank him/her for taking time to meet with you.

A few last words

The best mentoring programs are mentee-driven. No one mentor can help you achieve all your goals. One approach is to establish a "board of mentors" who will help you achieve specific, distinct goals.