

## Mentors and Mentoring for Graduate Students

Vibrant and intellectually dynamic relationships between graduate students and faculty mentors lie at the heart of graduate education. Successful mentoring is based on the principles of honesty, integrity, collegiality, mutual respect, responsibility, and accountability; in other words, trust. Outstanding faculty mentors are critical to graduate education and to creating a successful graduate student experience. Graduate student mentoring is an essential and central element of the job of all tenured and tenure-track faculty members at a research university.

Effective mentoring takes effort and is mastered through experience. Mentoring requires good interpersonal skills: listening, empathy, and problem solving. Good mentoring practices vary according to the needs and stage of professional and academic development of each student. Ideally, mentoring is provided by two or more faculty members, with each providing guidance that draws from their own strengths and skills. Effective mentoring requires planning and thought to help the student develop into a fully independent researcher.

A mentor has many different roles. First and foremost, the mentor is the student's academic advisor, helping the student adapt to the culture of the department and the discipline and to navigate important relationships for professional success. A mentor provides advice and guidance on formulating research questions and on acquiring the skills needed carry out the research. Although the student's research may be aligned with and advance a faculty member's own research, a good mentor puts the student's interests ahead of their own when it comes to the student's project. A mentor provides support to the student during challenging times, both in their academic journey and in their personal lives. A mentor offers career advice and should always be ready to give prompt feedback and to write strong but honest letters of recommendation. A mentor should be open to and support the variety of career paths that interest the student, both within and outside academia.

The key elements of mentoring are listed below.

- **Aligning expectations.** A critical element of the relationship is two-way communication to minimize misunderstandings about expectations. Because expectations can change as students advance, these conversations should occur frequently—at least several times per semester. Mentors need to design and communicate clear goals and consider how personal and professional differences may affect expectations. Expectations about the nature of the mentor-mentee relationship must also be clearly communicated. Alignment of mentor and mentee expectations will create a productive and functional relationship.
- **Assessing the mentee's understanding.** The mentor should develop strategies to assess the mentee's understanding of the core concepts and skills involved in the research or project, identify any gaps in understanding, and determine appropriate steps to fill those gaps.

- **Addressing issues of equity and inclusion.** There are many dimensions of diversity that come to play in the mentor-mentee relationship which offer both challenges and opportunities. It is important to recognize the impact of conscious and unconscious assumptions, preconceptions, biases, and prejudices that can adversely affect the relationship. Vibrant intellectual environments require the active engagement of diverse perspectives.
- **Fostering independence.** The goal of mentoring is to help the mentee to become a fully independent researcher and scholar. Working together, the mentor and mentee will define what are the core elements of this movement toward independence. The growing independence of the student will change his or her relationship with the mentor, a transformation that both parties should welcome. The mentor must help to build the student's confidence, trust, and sense of independence through the creation of an environment that fosters the achievement of specific goals.
- **Promoting Professional Development.** The mentor works with the student to identify and strive for academic and professional outcomes. The mentor should help the student develop a written strategy for professional development with concrete milestones. The mentor must engage in an open dialogue with the student about balancing competing demands, needs, and interests of both mentor and student (e.g., teaching, research productivity, grant funding, creativity and independence, career preference decisions, non-research activities, personal development, work-family balance, etc.).
- **Cultivating Ethical Behavior.** The mentor teaches ethical behavior by modeling it in the conduct of research, the drafting of presentations and publications, the fair assignment of authorship, and the treatment and evaluation of students. The mentor models ethical behavior by staying sensitive to the power imbalance in the advisor-student relationship. Students rightly see their advisors as crucial gatekeepers; it is essential not to abuse that position of power and influence.
- **Maintaining effective communication.** Achieving all of the above requires identifying and employing multiple and mindful strategies to improve communication effectively across diverse dimensions. Mentors must learn how to communicate with students across a range of differences, including background, experience, discipline, ethnicity, gender, age, and positions of power. Key skill sets include active listening and the ability to provide constructive feedback.
- **Creating Healthy Spaces.** Effective mentoring includes providing holistic support for students. Mentors need to be sensitive to the possibility that students could be facing serious non-academic issues, including physical or mental health challenges; financial stress; family tensions; caregiving responsibilities; or personal distress, such as grief over the death of a loved one or sadness from being away from home or apart from a partner. Mentors may or may not feel comfortable discussing these issues with their students and should be sensitive to the fact that students may not want to discuss specifics with their mentors.

They should, however, create an atmosphere that encourages students to share information about mitigating circumstances and reassures them that such challenges will be taken seriously and accommodated. Further, mentors should be aware of counseling, legal, and other resources available on campus and encourage students to make use of these, as appropriate. While mentors should be open to learning about challenges faced by their students, they should not overstep professional boundaries by asking overly personal questions or making inappropriate personal requests.

- **Providing Feedback.** Students require clear, prompt, and regular feedback regarding their skills, progress, and potential. Providing students with constructive feedback is a crucial part of the mentor's job and contributes significantly to the student's to academic and professional development.

Becoming an effective mentor takes time and practice. Reflecting on your own mentor-mentee experiences will enable you to develop and articulate your approach to mentoring. An effective mentoring relationship enhances the experience of both mentor and the graduate student resulting in greater productivity, success, and enjoyment.

#### Resources for Mentoring

##### For Mentors

- [UMD Graduate Statement of Mutual Expectations](#)
- [Individual Development Plan](#)
- [Office of Civil Rights & Sexual Misconduct](#)
- [Office of Diversity & Inclusion \(TerrapinStrong Education\)](#)
- [Office of Graduate Recruitment & Community](#)
- [National Research Mentoring Network](#)

##### **Publications**

- [Entering Mentoring](#), Christine Pfund , Janet L. Branchaw , Jo Handelsman
- [Effective Mentoring in STEM: Practice, Research, and Future Directions](#)
- [Making the Right Moves: A Practical Guide to Scientific Management for Postdocs and New Faculty](#)

##### For Students

##### Publications

- [“Mentoring Up: Learning to Manage Your Mentoring Relationships”](#)
- [“Making the Most of Mentors: A Guide for Mentees”](#) Judy T. Zerzan, Rachel Hess, Ellen Schur, Russell S. Phillips, Nancy Rigotti
- [“Introduction to Mentoring: A Guide for Mentors and Mentees”](#) (APA)