

"Effective mentoring at the graduate and postdoctoral stages...has long been identified as an essential catalyst for performance, success and career advancement." Academic Practice in Ecology and Education, https://onlinelibrary.wiley.com/doi/full/10.1002/ece3.4527

"Students with good mentors are more likely to have productive, distinguished, and ethical careers that reflect credit on the mentors and enrich the discipline. Effective mentoring helps ensure the quality of research, scholarship, and teaching well into the future."

Rackham Graduate School, University of Michigan, "How to Get the Mentoring You Want: A Guide for Graduate Students"

https://rackham.umich.edu/wp-content/uploads/2018/11/mentoring.pdf

The following explanation of graduate student mentoring Best Practices is taken from the National Council for Graduate Schools https://cgsnet.org/best-practices-o?page=15.

Graduate Student Mentoring Best Practices

Because mentorship is central to doctoral education, the design and monitoring of the processes for "managing" this one-on-one relationship between faculty and student are critical. And precisely because the relationship is personal, it easily avoids evaluation and scrutiny.

A graduate school can emphasize to students and faculty alike the importance of positive mentoring by providing workshops and discussions about mentoring for faculty and graduate students. Another resource is the Faculty Development Center that could provide ongoing mentoring workshops. Faculty members who have never served as graduate mentors should be provided workshops on successful mentoring. A speaker series devoted to mentoring could be made available to faculty and graduate students. The Graduate Student Association can offer an annual mentoring award to recognize the effective mentors on campus. There are multiple ways to encourage greater dialogue about the importance of the mentoring role.

An effective mentoring system should address the following issues:

1. The process of matching mentors and students should be openly explained to new doctoral students in the departmental orientation program. While some departments assign students an advisor upon admittance, others encourage students to choose their own advisor based on their preferences and schedule. The first option may make sense in

some disciplines where research is very specialized and students are expected to carry forward aspects of research closely aligned with that of their faculty advisors; in such cases, a student's "fit" within a program and the intersection of research interests between student and mentor may be closely related. In other fields, however, this early assignment of student to advisor may be too "random," failing to take into account personality differences and the existence of a more suitable mentor. The second option, while more personalized, can have the disadvantage of being a protracted process. Without the support and guidance of an experienced advisor, some students may wander aimlessly through what they feel to be a maze of written and unwritten rules, regulations, roadblocks, and personal obstacles. Some departments opt for a group of advisors for each student rather than one mentor, and in some disciplines this strategy works effectively. The graduate program, led by the chair or the graduate program director, should have in place an effective system for this matchmaking and make it clear to everyone—students and faculty alike —how it works.

- 2. The selection of a mentor for students from underrepresented populations should be handled with some sensitivity. Women, underrepresented minorities, and international students in the sciences and engineering often prefer mentors who are their same race, nationality, and/or gender. However, they frequently experience difficulty finding such a mentor because of the dearth of minority, international, or women faculty in their departments. Furthermore, students who might move from a nurturing liberal arts undergraduate experience to a more impersonal research university can be in for a culture shock. Being sensitive to the differences and backgrounds students bring can be helpful in fostering a more supportive atmosphere. At the same time, it is important to help students find a mentor who has the most to offer in terms of guiding the research experience and building a professional career.
- 3. There should be a clearly articulated process for changing mentors if the match does not "work." When either the mentor or student is unhappy with the match and has no way out of the relationship, the results can lead to unnecessary conflict and eventual student drop-out. If the student is supported by the mentor's grant, he/she may think that changing mentors will lead to the loss of an assistantship, and so the student either gives up or struggles miserably to the end. Written procedures developed by the graduate program for addressing such mismatches will make it more likely that the atmosphere of doctoral education is healthy for all involved.
- 4. Regular meetings of faculty and students in each graduate program can facilitate communication and serve as a support system. These meetings can be either formal or informal, monthly or less frequent, but their ultimate purpose is to improve communication skills, share concerns, build trust, promote networking, and uncover problems before they become major.
- 5. An annual student performance review should take place by a team of faculty in the graduate program, including the research mentor. The review helps to track performance, highlight areas of growth and improvement, and pinpoint any potential problems that might exist. The process helps to foster an environment of continuous communication and feedback and provides students with a broader mentoring support. The review also provides an opportunity to evaluate the status of the mentoring relationship and identifies or anticipates potential difficulties within the relationship. Should a situation arise in which a student wishes to switch advisors, this process provides a safe way to do so. A discussion about the student's progress among a group of

faculty beyond just the mentor will provide an opportunity for problems to be dealt with before they threaten the success of the student's degree completion. The student should be made aware that he/she can appeal to this committee if problems arise that cannot be resolved by the mentor. Such a mechanism provides support for both the mentor and student by enlarging the scope of the research experience beyond the mentor/student relationship.

- 6. Establish a mechanism for identifying and addressing weaknesses in the academic background of new students. Even with a rigorous admissions process, some students will invariably require some background coursework or individualized tutoring around some specific subject. International students in the natural sciences, for example, may be better prepared for graduate study than some domestic students. Students from small, undergraduate institutions may lack the same breadth of academic instruction as those from larger research universities. And, finally, those students for whom graduate study is not appropriate should be provided counseling and assistance to pursue other options as early as possible. The graduate program that is cognizant of and aware of these individual differences in academic background will be in a stronger position to foster the success of all their graduate students.
- 7. A peer-mentoring program for new doctoral students can supplement the mentoring provided by faculty and help build community within the graduate program. Peer mentors selected from more advanced graduate students should be trained at providing support to new students in their graduate program. Peer mentors are often able to decipher the unwritten rules of the institution or the dominant culture and can be more effective than faculty in sharing survival skills. This approach can be particularly helpful to women and students of color when matched to a successful student of the same race or gender. These student mentors might receive a modest supplement to their graduate assistantships to perform this service. Such a program provides not only academic but also social support to both peer mentors and new graduate students.

Establishing a Mentoring Relationship

When Graduate Programs officially offer and accept a student, the program is assuming responsibility to provide official graduate mentor(s) who will guide the student toward successful completion of the program--assuming the student desires to complete the program, continues to meet the program requirements, and adheres to the Graduate School Professional Conduct policy (appended below). Official mentoring relationships within graduate programs usually take one of two forms.

- 1. Assigned pre-dissertation relationship between graduate supervisor and a new graduate student. In many programs, students do not choose a dissertation mentor/join a research group until later in the program. The program, however, should assign an initial faculty supervisor to guide students in the early stages.
- 2. The relationship between graduate student and their dissertation advisor/PI. This is the mentor relationship mutually agreed upon by both student and faculty to take on the responsibility of guiding student progress and dissertation research through the conclusion of their degree.

The Graduate School encourages programs to develop clear steps to creating these official mentoring relationships, as well as guidelines for the dissolving of these mentoring relationships. The Graduate School suggests the following steps.

- 1. Programs should have clear reasoning for assigning initial pre-dissertation mentors, although these reasons can vary from field to field. For example, a program may assign based on the alignment of student and faculty research interests. The Graduate School recommends that a version of a mentoring agreement (as described below) be discussed and signed between mentor and mentee.
- 2. Programs should have clear steps for the formalization of the dissertation advisor/PI relationship. The Graduate School recommends that a mentoring agreement (as described below) again be discussed between mentor and mentee.
- 3. Programs should develop clear steps for the dissolving of a mentoring relationship. A mentoring relationship can be dissolved by either mentor or mentee if 1) research interests no longer align and the GPD agrees with the dissolution 2) the mentoring agreement has been violated by either party and the GPD agrees with the dissolution. The Graduate School recommends that programs formalize how to handle requests for the dissolution of mentoring relationships, as well as how to reassign mentors for students.

Utilizing a Mentoring Agreement

The Baylor Graduate School encourages early conversations between advisors and advisees to establish expectations for their professional relationship. These conversations will encourage regular interaction between advisors and advisees, provide a mechanism for an annual review process, and provide an early warning system for potential problems arising between advisors and advisees. They will also ensure that both graduate students and their mentors remain actively invested in the professional relationship. A successful mentoring relationship will advance a student's graduate career through shared guidance, experience, and expertise.

The Graduate School strongly suggests that each advisor/advisee pair use the following mentoring agreement to structure expectations, build mutual trust and respect, and establish appropriate boundaries. Mentoring agreements do not serve as a legal document, but rather as an agreement between advisor and advisee.

The following mentoring agreement is adopted from the Rackham Michigan Graduate School as highlighted by CGS. https://cgsnet.org/how-get-mentoring-you-want-guide-graduate-students-diverse-university

Setting Expectations:

- 1. How often will the advisor and advisee meet?
- 2. Where and when will the meetings take place, and what times/places are most professional and comfortable for both advisor and advisee?
- 3. Create a timeline of goals/research progress for each semester and discuss regularly about how those goals will be met.
- 4. Discuss expectations for ethical and professional behavior standards. Review together the Graduate School Professional Behavior policy.
- 5. Clarify expectations for student responsibility in projects, research, participation in group meetings, etc.
- 6. Clarify expectations for advisor responsibilities to feedback, research activities, etc. How much time does an advisor need to provide feedback on written work, such as publication drafts, seminar papers, and dissertation/thesis chapters?
- 7. Clarify expectations for authorship and intellectual property (including publication, public blog posts and podcasts, etc.).
- 8. Clarify expectations for vacations, absences, and time away from campus. Advisors should be aware that graduate students are only expected to work 20 hours maximum per week for their assistantships. Their research and seminar participation will be in addition to the 20-hour-per-week assistantship but should still be reasonable and ethical.
- 9. Create a timeline for grants, fellowships, and participation in professional meetings.
- 10. Create a timeline for reasonable progress through degree program including the requirements to meet each milestone.
- 11. Discuss what options a student has if he/she wants to pursue a different advisor.

The Graduate School Policy on Professional Conduct is as follows:

"In keeping with Baylor University's commitment to mutual respect and personal integrity, the Graduate School expects that all students will conduct themselves in a manner befitting their professional identity. This includes personal conduct towards faculty, staff, peers, and colleagues both on and off campus. Failure to display professional conduct may result in disciplinary action, including dismissal from the graduate program."

Students accused of violating this policy have a right to a fair hearing. In recognition that some acts of professional misconduct may also involve violations of Baylor's Student Conduct Code, Department faculty or the Graduate School may also and simultaneously report concerns or allegations of a student's behavior to Baylor's Judicial Affairs office.

Graduate Student Mentor Agreement

Commitment of Graduate Student:

- I acknowledge I have the primary responsibility for the successful completion of my degree and development
 of my career. I will remain committed to my graduate education and maintain high levels of professionalism,
 self-motivation, engagement, curiosity, and ethical standards. I will seek guidance from faculty, career
 counseling services, committee members, and other resources available to me.
- 2. I will meet regularly with my advisor and provide regular updates about my progress.
- I will work with my research advisor to develop a thesis/dissertation project. I will strive to establish a clear timeline and meet established deadlines.
- 4. I will work with my research advisor to select an Advisory/Supervisory/Dissertation committee. I will commit to checking in with this committee on a regular basis (as suggested by research advisor).
- 5. I will attend and participate in cohort meetings, laboratory meetings, seminars, journal clubs, academic workshops, etc., that are part of my educational program and recommended by my faculty.
- 6. I will maintain the academic and ethical standards of my graduate program, academic field, and institution. I will be knowledgeable about the requirements for my program and assistantship and meet the requirements.
- 7. I will participate in all training required by the university and my program for my research and teaching responsibilities. I will comply with all institutional policies.
- 8. I will be a good research citizen. If my research involves group work and/or builds from the research of my advisor/PI, I will receive the written permission of my research group and/or advisor before publicly sharing or publishing research findings. I will agree to take part in all shared research group responsibilities and behave in a collegial and professional manner.
- 9. I will discuss authorship and collaborative research with my research advisor and cohort peers.
- 10. I will uphold the Graduate School standards for professional behavior.
- 11. I will maintain high personal and ethical standards for my own research.

Students who belong to research labs should also consider the following:

- 12. I will attend and participate in laboratory meetings, seminars and journal clubs that are part of my educational program.
- 13. I will comply with all institutional policies, including academic program milestones. I will comply with both the letter and spirit of all institutional safe laboratory practices and animal-use and human-research policies at my institution.
- 14. I will participate in my institution's Responsible Conduct of Research Training Program and practice those guidelines in conducting my thesis/dissertation research.
- 15. I will be a good lab citizen. I will agree to take part in shared laboratory responsibilities and will use laboratory resources carefully and frugally. I will maintain a safe and clean laboratory space. I will be respectful of, tolerant of, and work collegially with all laboratory personnel.
- 16. I will maintain a detailed, organized, and accurate laboratory notebook. I am aware that my original notebooks and all tangible research data are the property of my institution but that I am able to take a copy of my notebooks with me after I complete my thesis/dissertation.
- 17. I will discuss policies on work hours, sick leave and vacation with my research advisor. I will consult with my advisor and notify fellow lab members in advance of any planned absences.
- 18. I will discuss policies on authorship and attendance at professional meetings with my research advisor. I will work with my advisor to submit all relevant research results that are ready for publication in a timely manner prior to my graduation.

Commitment of Graduate Mentor:

- 1. I will be committed to mentoring the graduate student as a future member of the scholarly community.
- I will be committed to the research project of the graduate student, including planning, directing, and
 establishing a reasonable timeline for the project. I will be committed to overseeing student research and
 reading student work within a timely manner. I will help the student select an appropriate
 Advisory/Supervisory/Dissertation/Thesis committee.
- 3. I will be committed to meeting individually with the graduate student on a regular basis and providing appropriate resources.
- 4. I will be knowledgeable of the requirements and deadlines of the graduate program and communicate those requirements and deadlines with the student.
- 5. I will discuss authorship and attendance at professional meetings with the graduate student and help train the graduate student to be a good research citizen. I will acknowledge the graduate student's contributions to projects beyond his or her own, and I will work with the graduate student to publish his/her work in a timely manner.
- I will lead by example and facilitate the training of the student in necessary skills, such as oral and written communication, grant writing, archival research, animal and human research policies, ethical conduct of research.
- 7. I will be supportive, equitable, accessible, encouraging, and respectful. I will work hard to provide an emotionally supportive and intellectually stimulating learning environment that is free from harassment.
- 8. I will provide career advice and assist in helping the student meet career goals. I will also participate in helping secure and facilitate funding to support
- 9. I will not require the graduate student to perform tasks that are unrelated to his/her training program and professional development.

Graduate mentors supervising graduate students within a research lab or working on collaborative research projects should also consider:

- 10. I will expect the graduate student to share common laboratory responsibilities and utilize resources carefully and frugally. I will lead by example in these areas.
- 11. I will discuss intellectual policy issues with the student with regard to disclosure, patent rights, and publishing research discoveries. This will include discussions of research in public forums such as blog posts, podcasts, etc.