

# Natural Selection: The Mentoring Edition

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In today's society they may be hidden, but good shepherds do exist. They nurture. They guide. They use their foresight to keep their flock safe and ensure its survival. As graduate students, we often find ourselves members of such a flock, seeking guidance, knowledge, and survival skills from those who act as shepherds — our mentors.

A good mentor can ensure successful completion of your research project. Furthermore, healthy mentor–mentee dynamics facilitate a prosperous graduate experience. This article aims to define several attributes that characterize a good mentor and to encourage you to progress from flock member to shepherd status by becoming a mentor.

## Attributes of a Mentor

There is no perfect formula for selecting a mentor, but below are three characteristics that scholars agree a mentor should have:

1. *Competency.* Your mentor should have expertise in your field and be willing to share this knowledge. Additionally, publications, successful grants, and previous experience mentoring graduate students are ideal. You should be able to have open conversations about these factors.
2. *Academic rigor.* Your mentor should challenge you. They should provide constructive feedback (both positive and negative) on projects and presentations. These discussions are crucial for personal growth and career development.
3. *Personal interest.* Your mentor must have a personal interest in your development. This requires you to define your immediate- and long-term goals. For example, do you hope to find internships, enter academia, participate in outreach activities, engage in teaching opportunities, edit for a science journal, or advocate for policy and ethics? Whatever your goals may be, your mentor should be informed about and encourage these goals while helping you remain realistic. Equally as important, your mentor must have a personal interest in, or at minimum a tangential attachment to, your research project.

Another factor to consider is what type of interactions benefit you the most. Time is an example: Are you the graduate student who needs to have weekly meetings and work side by side with someone? If so, you may need a mentor who spends more time on campus. Are you the graduate student who is most productive when left to their own devices for extended periods of time? In that case, you may benefit from a mentor who does not micromanage.

## The Mentoring Network

Most people have only a primary mentor; however, it is beneficial to build a mentoring network. Think of this as your personal advisory team — each member has unique experiences that can be useful to you.

This is not to be mistaken for a thesis committee, which can be comprised of mentors but has the primary function of assessing your research and progress as a graduate student. A mentoring network is composed of individuals who can give advice related to your specific life and research goals. One member of your network may provide guidance for teaching and instructional activities; another member may offer input on a particular experimental method.

Building this assembly of mentors can begin with simple daily interactions. You also can find potential mentors at educational workshops, networking socials, or specific programs geared toward diversifying science. An example of the latter is the Society for Neuroscience's Neuroscience Scholars Program. Although this may only be useful for women and/or minorities in cognitive and brain sciences, there are a number of similar programs targeting broader audiences.

### **Progressing From Mentee to Mentor**

No one wants to be in the flock forever. The question remains, at what point have you been mentored enough? The answer is simple: never. There will always be someone who can serve as an advisor and guide you toward your goals; however, you can start to be a mentor yourself today. Whatever your current status may be — undergraduate, graduate student, teaching assistant — you have capabilities that someone else wants to benefit and learn from.

Consider what skills you have and who may find those skills useful. In addition, remember that you may be able to mentor someone who is not directly associated with your field. As a fellow graduate student, I understand that when you are asked what skills you have, imposter syndrome may sneak in, and the candid answer seems to be one of two extremes: nothing or (for our less modest colleagues) everything. Ask yourself this: Are you in a graduate program? Yes? Then you clearly know more than nothing. You have advice on how to survive the undergraduate experience and how to approach graduate school applications and interviews. One more question: Are you still in a graduate program? Yes? Then you do not know everything. You do, however, know more than enough to offer your current level of expertise to someone who may be an undergraduate or who is in earlier stages of your program. Becoming a mentor offers numerous opportunities:

- *Giving back.* Mentor within a community that has given to you: your university, science society, or neighborhood. If you choose a science community, perhaps you will build some research karma!
- *Achieving personal growth.* Fostering longstanding mentorships can allow you to learn from your mentee and refine your own leadership skills.
- *Facilitating career development.* The type of mentoring you choose may be specific to your career goals; for example, mentoring high school students in STEM may be useful if you are interested in a career focused on diversifying STEM fields, while mentoring an undergraduate may be useful if you plan to enter academia.

If you are convinced and ready to jump into mentoring, consider researching programs within organizations such as Human Brain Mapping, American Association for the Advancement of Science, YWCA, or programs established within your institution. Those studying neuroscience and psychology can reach out to their local Society for Neuroscience or Psi Chi chapters; these organizations offer a vast number of outreach opportunities. Lastly, you can always pave your own path. Public schools often are

open to creating either long-term or short-term mentoring programs.

Mentors of today ensure the success of future potential mentors, so regardless of your choice, keep in mind that when looking for a mentor, you should seek characteristics similar to those you hope to embody. Be a credible and positive role model who is genuinely interested in your mentee as an individual, and find a mentor who can do the same for you.

### **Further Reading**

Knox, P. L., & McGovern, T. V. (1988). Mentoring in academia. *Teaching of Psychology, 15*, 39–41.

Kunselman, J., Hensley, C., & Tewsbury, R. (2003). Mentoring in academe: Models for facilitating academic development. *Journal of Criminal Justice Education, 14*, 17–35.

National Science Foundation. (2017). Data tables. Retrieved from <https://www.nsf.gov/statistics/2017/nsf17310/data.cfm>

Ragins, B. R. (1989). Barriers to mentoring: The female manager's dilemma. *Human Relations, 42*, 1–22.