Finding a Research Mentor

Participants in the RISE program perform research under the supervision of one of the pre-approved UTSA research faculty. This article is designed to help you to make your choice of whom to work with. The right research mentor can greatly enhance your experience and further your excitement and preparation for a research career. The wrong one could give you second thoughts about a career that you might have otherwise enjoyed. Below, we provide information on how to choose a compatible mentor for your research.

You will select your mentor from a group of tenure-track faculty who should do the following, or make sure that a trusted associate does so:

- Assist you in developing a reasonably sized research project
- Help you get started with your project and assure that you make progress
- Coordinate your training in research techniques
- Provide supplies and laboratory space
- Help you troubleshoot research problems
- Give you encouragement and feedback about your progress
- Show you what life as an academic scientist is really like
- Help you to develop critical thinking and a scientific mindset
- Help you in researching a good graduate school
- Assist you in building a professional network of contacts

Regarding laboratory entry- You may immediately enter someone’s lab, or you may take a few weeks to rotate through several labs to get a feeling for them. On the RISE (http://www.utsa.edu/mbrs/) web page, you will find a list of participating faculty members and often a brief description of their research interests. Their description will be linked to a more extensive description of their research interests and a description of projects currently being explored in their laboratories. Choose at least five program faculty who are performing research that interests you. Provide a list of people whom you find interesting to Dr. Taylor; she make recommendations, and may also suggest additional faculty members with whom you may be compatible.

You will then email these individuals and set up meetings. You should prepare for these meetings by looking at their websites and also at their up their recent journal articles on Googlescholar or Pubmed (http://www.pubmed.org) or use other internet resources to find publications and laboratory websites prior to visiting. Your effort to do so will generally result in the researcher looking favorably on you because you will be displaying a high level of motivation. Although you will likely find their publications
difficult to understand at this point, you should at least be able to get a basic idea of
the research that they do. Looking up their publications has the added benefit of
letting you know if the person’s laboratory is actively publishing, which increases
your chance of authorship, which is desirable for doctoral program admittance.

Because many of the faculty members are locked behind security doors, we
recommend that your first contact come email. If the potential mentor does not
immediately respond, they may be buried in work; contact them again after a week
or so, or go find them during their office hours (their department maintains a list of
when/where these hours are). When you reach the potential mentor, identify that you
have been admitted to the RISE program and either set up an appointment to speak
to them face to face, or continue to interact with them via email/phone if they wish.

A good contact email can go as follows: “Dear Dr. XXXXX. I am an
undergraduate Sophomore/Junior/Senior (pick one) XXX major and was recently
admitted to the RISE Research Training program. I am looking for a lab in which to
work and am very interested in your research on ________________. If you
accepting students at this time, I would like to schedule a meeting with you to discuss
your research and possible opportunities in your lab.” As a RISE trainee, I have the
option to participate in at least two two-week rotations, but after this I will be in a lab
for ___ length of time until graduation. Thank you, _____________>

Establishing a successful working relationship with
a faculty member requires openness and honesty. The
faculty member will have questions for you to judge your
level of motivation and enthusiasm and to determine your
interests in their research field. They will ask you about
your academic background and grades, prior research
experiences, research interests, time availability, and
future goals. Be prepared to explain what you hope to
get out of a research experience, why you are interested
in this mentor’s research and what general type of project you are interested in. It is
advised that you bring a one-page “Bio” or CV, containing your contact information
and summarizing any research experience that you may already have. A template
for a CV is located at http://www.utsa.edu/mbrs/resources.htm .

In turn, ask the mentor to describe the research projects going on in his/her labs
and which projects you might be able to get involved in. You should also inquire
about what techniques you would be learning, who would be your primary trainer,
and with whom you would be working. Is your schedule compatible with that of the
person whom you will be assigned to work with? What type of time commitment do
they expect? Assess for yourself if the mentor’s communication style is compatible
with yours. Is he/she high or low stress? Does the mentor seem interested in you
as a person and make time for you?

While rotating in the lab, you also be able to speak with other laboratory
members and find out more about the lab. How many hours do students generally
work (this varies greatly between laboratories and you may not look good if you work
significantly fewer)? Is it a quiet, serious laboratory, or loud and noisy? Is it a messy
lab or extremely organized? Do the students like each other and “hang out” with one
another after hours? Do you “click” with the person with whom you will be working? All of these things should be taken into consideration when assessing your compatibility.

After your meeting, thank the person for their time and information without making a commitment, complete the rest of your interviews, and get back to them as soon as possible. If you fear that this particular mentor or the laboratory and you are not a good match, pay attention to these feelings and interview additional potential mentors. Before you leave, make sure that the faculty member knows how to get in touch with you! In cases where you know that your research interests don’t align, ask this person if he or she knows of a faculty member with whom you may have more compatible interests or who is looking for students like you.

After careful consideration after your rotations, if you feel that the mentor/research project is right for you, ask whether the researcher will agree to be your mentor and allow you to work on the project you have discussed. Or, ask whether they will be willing for you to do a short rotation through the laboratory, to get a better “feel” about the laboratory environment. Be aware that the mentor, also, may wish to hold off and do some inquiring of his/her own. Remember to thank those whom you do not choose! This is the polite thing to do and represents you and the program well!

If you are turned down for a research project, don’t take it personally as there are many reasons why a faculty member may deny your request: the current research projects may be different than the projects listed, he/she may be insanely busy or already have the maximum number of students that can successfully be mentored, etc.

Continue to meet with faculty members or perform rotations until you have found a mentor with whom you have a good rapport, who will give you a research project that interests you. Tell this person that you’d like to work in his/her laboratory and have them write an email to the RISE and MARC Program office (gail.taylor@utsa.edu) to that effect. If you are having trouble finding a laboratory, do not hesitate to talk to Dr. Taylor or Dr. Barea- they will help you out!

Finally, if you are in a laboratory but find over time that you are having problems or not enjoying your research, please come and talk to Dr. Taylor. The RISE program is designed to be an positive experience, and if it’s not turning out that way, please allow us to help you figure out how to improve things!

Good luck! 🧘‍♂️