ENGINEERING STUDENT SUCCESS CENTER Finding a Research Mentor

Before reaching out to a potential mentor, determine a research topic that you are curious about. This can be broad or specific, but you need to find a research mentor who can teach you how to research your interest areas. If you are unsure of your interest area, first step in the process below may help you narrow your interest. Once this is done, you can reach out to potential mentors.

- 1. Do your homework
 - a. What subject or department do you think tries to answer your questions or studies your interest area? Read UNM department websites that seem related to your interest. Look for the "faculty" or "research" tab to find the people that do research. Some faculty have websites for their own research labs that you can look at as well.
 - i. Does their research sound interesting to you? Does it seem related to what you want to study? Do you want to talk to them to learn more?
 - ii. Look for any publications by the potential mentor and skim over them so you have an understanding of what they research. You can use this information when you make your initial contact. "I read some of your papers on [topic] and am very interested in [specifics of the broad topic]." (See "Meeting in Person below for more on this.)
 - iii. You can contact the professor that runs the lab, or any of the research assistants or graduate students that work in the lab. If faculty or graduate students are not interested in working with you, you can consider working with upper-level undergraduates as well. When someone says no to working with you, ask for a referral to someone else who might be a better fit for you.
 - b. Google your topic with the word "UNM" and read the websites that come up. Sometimes news articles or other sites will lead you to a person who is working on research related to your topic. You can use <u>directory.unm.edu</u> to look up the email address for anyone affiliated with UNM.
 - c. Look up professors or teaching assistants that teach classes related to your topic at <u>schedule.unm.edu</u>. You may need to use a department's website to find the course numbers before entering the course numbers in to schedule.unm.edu.
 - d. Find the websites for other undergraduate research training programs (MARC, El Puente, McNair, etc.) and see if they list faculty mentors for the program. These professors have already demonstrated a commitment to undergraduate research and may be more likely to work with you.
 - e. Look for Research Centers in the area (at UNM or in Albuquerque) which may fit what you are looking for and then look into who works at them and what they do.
- 2. Use your network:
 - a. Tell people you're looking: Tell your friends, your instructors, advisors, etc. what topic you are interested in and ask if they know of people who work in that area.
 - b. Go to office hours for your professors to ask for recommendations of professors or graduate students that may want to work with an undergraduate student on your topic.

So, you found someone(s) that you want to talk to. The next steps are:

- 1. Send an email to set up a meeting, or use your network to get a meeting with them.
- 2. Meet with the person to learn more about their research and ask about next steps.
- 3. If they won't work with you, ask for introductions to other people who might be interested.
- 4. Repeat until you find a mentor.

Professionally Emailing a Professor

The goal of this email is to present yourself as a professional who is legitimately interested in the professor's research. So, you need to tailor your message to the specific professor.

- 1. **Meaningful subject line**: Interest in your (TYPE OF) research at UNM
 - a. Avoid vague titles like "research interest" or "research mentor". Personalize the title, which helps increase the chances of them opening the email.
- 2. Greeting: "Dear Professor (LAST NAME),"
- 3. **Introduce yourself**: My name is (FIRST & LAST NAME). I am a (YEAR IN SCHOOL) undergraduate student studying (MAJOR). Let them know if you already know them ("I was a student in your [COURSE] for [SEMESTER].") or are connected through another person ("Professor Sawyer recommended I reach out to you.").
- 4. **Brief and polite reason for your email**: "I am writing because I am very interested in your (TYPE OF) research, and I hope to meet to discuss your research with you further".
 - a. I do not ask them to be my mentor for a project in the email. Instead, express interest in speaking further. At the in-person meeting, if it goes well, I may ask them how to get involved in their research or to mentor me on project.
 - b. Mention details from the papers you read to show you did your homework and take initiative, all attributes they look for in undergraduate researchers.
- 5. **Next step**s: Do you have office hours that I can attend, or is there another time that works better for you to meet over the next few weeks?
- 6. **Give them an "out" while being productive**: I understand if you are unavailable to meet with me this semester. If that is the case, I would appreciate any recommendations of other professors or graduate students who might be interested in working with an undergraduate student on (GENERAL AREA OF RESEARCH INTEREST) research.
- 7. Thank them: Thank you for your time and consideration.
- 8. Sign your name: Sincerely, Sign it with your first/last name.
- 9. **Professional email signature:** Add a signature with your name, major, UNM, email address, and any other leadership positions you hold at UNM at the bottom of the email.

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- 10. **Reduce errors**: Run spell check! Have a friend read it.
 - **a.** Errors are not professional and reduce likelihood of the person taking you seriously.

Meeting In-Person

You want to go in to your meeting feeling familiar with the person's work as well as how their work relates to your own interests. The interview is a two-way street. You are talking to them to see if they would be a good mentor for you. They are talking to you to see if they want to commit time to training you. So, in addition to asking questions about their research, you should be prepared to talk about your own interests and to ask questions about their mentoring style.

How to prepare for the meeting:

Learn more about the professor's research:

- 1. Read about their research interests on their website or Research Gate profile (<u>https://www.researchgate.net/</u> is like professional Facebook for researchers). There is usually a paragraph or bullet points describing the person's research interests and/or current projects. Take notes on any questions that come to mind about these topics and how you think these topics might relate to your own research interests.
- 2. Find their CV or list of publications and read the titles of several of them. See if you can match up the articles' titles to the professor's research interests that you read about in step 1.
- 3. If you have not already done so, go to <u>library.unm.edu</u> and download at least one of the professor's research articles that sounds interesting to you. Research Gate may also have articles and book chapters for download.
 - a. Read the abstract of the article. Take notes on any questions that come to mind about the article and how you think the article might relate to your own research interests. It's okay if you do not understand the article (you probably won't the first time you read it!). Write down the questions that come to mind and bring them to your meeting. Few people get the chance to talk to the actual researchers/authors that wrote a research article. You have a special opportunity to ask a researcher your questions.
 - b. If you have time, read more of the article and continue to take notes (check out the introduction and discussion sections).
 - c. If you have even more time, repeat this process with more articles. In addition to interesting articles, I try to read more recent articles as they tend to align better with the professor's current projects.

For help effectively reading scientific journals, watch this video: <u>https://youtu.be/B1MkPpTTKNk</u>

Learn more about your own interests:

- 1. Think about and practice describing your research interests in one sentence.
- 2. What research questions do you have about your interest area?
- 3. Think about and be able to explain why that topic is interesting to you: What motivates you to ask questions about this topic? Why do we care about this topic?
- 4. Google the topic and spend a few hours reading about it, watching videos, or listening to podcasts. Take notes on any questions that come to mind while you are exploring. Think about how your own research interests as well as this professor's interests relate to what you are reading, hearing, seeing, etc.
- 5. While you are exploring, identify more specific sub-topics within your larger topic that might interest you. Google those topics, too.
- 6. If you have time, go to <u>library.unm.edu</u>, search for key words related to your research interest area. Download at least one article that sounds interesting to you. Read the abstract (or more of the article) and continue to take notes.

Think about what you want to know about working with the professor:

You are considering working with this person for a whole semester, or even many years. What do you want to know before you commit to sharing your time, energy, and insight with them?

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In the first meeting, I usually ask general questions about their mentoring style, such as

- 1. What current research projects are you working on? What projects do you have planned for the next year... or next few years?
- 2. Have you worked with undergrads on research before? I tend to think it's a good thing if they have practice working with undergrads already.
- 3. What types of projects do undergrads typically work with you on?
- 4. What is your style for mentoring undergraduates on research?
- 5. What qualities of students tend to make students most successful when working on research with you?

Depending on how the meeting goes, I may feel comfortable asking them to mentor me on a project (see more info on this under "structure of meeting day" below). If the person agrees to mentor me, I may ask more specific questions about mentoring me in particular.

- 6. How frequently are you able to meet with me? (Be prepared to know how frequently you want to meet.)
- 7. Should we meet in person, over the phone, email, etc.?
- 8. What types of questions are appropriate for email and which should we meet in person about?
- 9. Is there anything else you want me to know about working with you?
- 10. What do you think are the next steps for our work together?

Put together notes for the day of your meeting:

- 1. Google how to say the person's name. You can sometimes find videos on YouTube or websites where the person introduces themselves, or other people introduce the person.
- 2. Synthesize your notes and questions on one sheet of paper.
 - a. I leave space for taking notes on the day of in each section of my notes and after each question of my notes.
 - b. I usually put a couple bullet points at the top of my notes about the professor's general research interests. Then I put a few notes about each of the articles I read.
 - c. I also include a few bullet points about my own research interests. Ideally, you can talk about your own interests without looking at notes, but these serve as a security blanket; you can look at the notes for a reminder of what to say if needed.
 - d. Put together a list of about 10 questions in the order that you would ask them (what question order might flow well in conversation). Star the top 3-5 that you want to ask. You may not even get to ask these questions depending on how the meeting goes. However, you should prepare lots of questions in case the meeting is organized in a way that requires you to ask the professor your list of questions.
 - e. Bring a printed copy of your notes sheet and something to write with. You may have a table to write on, but, more likely, you will be holding the paper in your lap. So, bring a nice folder to write on. Depending on how confident I feel about my notes, I may bring a second copy to give to the professor. If you intend to leave a copy with the professor, make sure you've run spell check and include your name and email address on the paper.

Structure of the meeting day:

Meetings can be in person, video chat, or over the phone. Meetings can be organized various ways depending on the professor's personality and familiarity with meeting with undergraduate students. Be prepared to ask your questions and leave. However, you should also be prepared for a friendlier meeting where you are simply going with the flow of conversation. In the go-with-the-flow meetings, make sure you know which questions you want to have answered before you leave. These more casual meetings often feel really great in the moment, but you can forget to ask important questions if you're not attentive to your notes at some point. If needed, read your notes quickly before leaving and ask your questions at the end of the meeting.

Keep an eye on time during your meeting. I try to keep these meetings to 30 minutes, but they often go for an hour. At the 30-minute mark, I usually say something like, "I want to be respectful of your time. Should we wrap up?" The professor might say they have more time at this point. You don't want to be checking your Created by Tara S. Hackel, Updated by Yadéeh E. Sawyer – January 2019 Page **4** of **5**

phone during the meeting. So, wear a watch, or say out loud, "Let me check the time," before looking at your phone.

- 1. Dress as nice as you can (business casual). Go early to find the room and arrive at least 5-10 minutes early. Check in with a staff person or wait outside the professor's office until you are invited in. If their door is closed, knock at the time you scheduled to meet.
- 2. It's okay to be nervous! Being nervous is just a reminder that you care. Remember to breath! And speak slowly. We tend to talk faster when we are nervous or excited (you're probably both). Sometimes I even write "breath" every few lines within my note sheet as a reminder. If you fumble when you're speaking, just start your thought over. The person you are talking to usually does not notice that you messed up while speaking unless you call attention to it. So, no need to apologize when you mess up, just correct yourself, and move on.
- 3. Start the meeting by thanking them for meeting with you and express excitement to be speaking with them. Gratitude opens doors and leads to a good first impression.
- 4. Start with an elevator speech where you tell them your name, major, year, and a little about why you requested the meeting.
- 5. After introductions, it's usually time to start asking questions. The profession will either start asking you questions, or you can start asking them questions.
 - 1. I like to start by telling them you read about their interests on their website and which article you read. Then, I ask them, "What projects are you currently working on?" You can fill in other questions about their research from there.
 - 2. Then, tell them about your research interests and your research questions. You can note topics that excite you and why. You can note areas that you are confused about related to your question. Do they seem interested in your topic? You can even ask them if they think their current work aligns with your questions and interests.
- 6. Now, it's time for the mentoring questions: I start by asking if they work with undergrads on their research and go from there.
- 7. Ask about next steps: Do they have anything you can read to learn more about your topic? If the meeting went well, you can ask if you can volunteer with them or attend their lab meetings. Can you work on a small project in their lab? If you are part of a research training program, would they feel comfortable mentoring you for that program? Do they suggest you talk to anyone else? When/should you meet again?
 - 1. Be understanding if they cannot mentor you. "I understand. I appreciate the time we had together today. Is there another person who might be interested in working with me that you recommend I reach out to?"
- 8. Respect their time: Once you've covered everything, thank them and get out!
- 9. Follow up: Send a thank you email within 48 hours after your meeting.
 - "Hi Professor [LAST NAME],

Thank you for taking the time to meet with me about your research. I enjoyed learning about [SOMETHING YOU TALKED ABOUT]. [REMIND THEM OF NEXT STEPS: For example, "you mentioned I could attend your next lab meeting. Can you please let me know once the meeting is scheduled?]

Thank you again,

[YOUR NAME & EMAIL SIGNATURE]"