

How do I find an undergraduate research experience on campus?

Start now!!! It is never too soon to start. Finding a research position can take time.

Your likelihood of landing a research position diminishes as you progress through your college degree (e.g., your chances of finding a position are very low as a Senior). Faculty members want a long-term relationship because they spend time and money to train you. To receive a return on that "investment" they need you to get to a point where you are contributing to the research mission of the group. Also, if you can work full-time over the summer with a commitment to keep working in the subsequent semesters, this is appealing to faculty because your training period is more focused and you start producing results more quickly and for a longer time.

First things first:

- 1. Put together a resume. Visit the Career Center (https://careercenter.umich.edu/article/resume-resources) for advice
- 2) Know how to get an unofficial transcript (via Wolverine Access)
- 3) Line up 2-3 people who can offer you references (if needed)

Ways to look:

If you are a first year student, then you may consider the <u>UROP</u> program (<u>https://lsa.umich.edu/</u> <u>urop</u>) for your sophomore year. UROP offer leads on finding research projects and mentors (not necessarily in chemistry) and can be a great way to acquire your first research experience.

If you are a Chemistry/Biochemistry/BMS/Chemical Sciences/ICS major, then pay attention to <u>Angie Cox's Monday Updates (via email)</u>. As the department receives information about research opportunities, they are collected and passed along to YOU. Many of these opportunities are for programs over the summer and at other locations. These will not earn you course credit, but may offer you other compensation and or sets of experiences. And, you will find *some* on campus opportunities here.

Angie also sends out information about the department's <u>Research Match</u>, an opportunity for you to find a research position with a faculty member in the Chemistry department. When you apply, be active in talking to the professors with whom you would like to work. Please note: the number of positions available is significantly smaller than the number of students who apply. A position is <u>not guaranteed</u>. Don't stop looking elsewhere; continue to actively search while you wait to hear back.

Looking on your own: *****A must do regardless of whether you pursue the first three options.

 Talk to everyone (instructors, graduate students, peers, companies that come to visit, department alumni with whom you've networked) about research. A few examples of questions to start a conversation include: "Are you doing research currently?", "What do you do?/Tell me about your project.", "How did you find out about your current project/position?", "What kinds of science do you envision doing in your next project/position?" You may learn something that you did not know and they may know of a way to connect you to a research mentor. 2) Do your homework. Read up on-line about UM research projects. Find 6-10 people that you'd like to do research with. Start with the Department of Chemistry (go to the Faculty webpages and follow the links to their research groups.) Look elsewhere on campus too! In particular, check out: Biology, Physics, the Life Sciences Institute, the medical school, Materials Science and Engineering, Biomedical Engineering, etc.

3) Contact faculty members about their research:

- Tell them that you are an undergraduate, what your major is, and that you are looking to participate in a research experience for credit (or as a volunteer, or for pay.)
- Let them know that you did your homework: tell them the specific things about their research that sounds the most interesting to you or that you are the most excited about. Be sure to mention how you found out about their research program (e.g. social media, peer reviewed publications, a seminar you attended).
- Tell them specifically what you can contribute: you work well with your hands; you are responsible; you are very curious and eager to learn; etc.
- Attach a resume and an unofficial transcript.

Then.....one of three things will happen:

A. No response....follow up politely once or twice about one week later.

B. You will be told "no." This is more common that you might think, but "nothing ventured, nothing gained" as the saying goes. It often takes lots of no's to get a yes. Don't take them personally. They are most often about time, money, and/or space. If you get the opportunity, ask for suggestions on how you could improve your approach.

C. You will be asked for an interview! Arrive promptly and ready with some questions to ask; be sure to meet the graduate students/post-docs/researchers with whom you will be working.

If the interview turns into a "yes" and you will be carrying out research for 398 or 399 credit, you should sit down with your research advisor at the beginning of the semester and lay out the requirements for earning a grade of "A" in the "class." Examples of criteria to discuss include: What times are you expected to be in lab each week? Are these times flexible (can you work more one week and less another)? Are you expected to attend group meetings? Do you need to write a weekly report? What kind of lab notebook do you need? At the end of the term, should you give a presentation? Write up a paper? **Put these in writing!**

Looking for a *summer research* experience outside of the University?

NSF sponsored REU: <u>https://www.nsf.gov/crssprgm/reu/</u> NIH Summer Internship: <u>https://www.niehs.nih.gov/careers/research/summers/index.cfm</u> Visit the Opportunity HUB (<u>https://lsa.umich.edu/opportunityhub</u>)