

How do I find a Research Opportunity?

To learn more about Chemistry-Related opportunities, please visit <http://tinyurl.com/ricechemistry>.

Where do I start?

There are many options for undergraduate research, but do not be overwhelmed by them! The key thing is to find for a lab with research that is interesting to you. The CHEM 391/491 Course Instructors are happy to meet with you to help identify several potential leads. You can also use your connections with other students, TAs, or recent course instructors to help you widen your search.

Positions are generally not advertised, so the best approach is simply to contact any faculty member whose research interests you. To find out which faculty members are working in areas that you find intriguing, please refer to Appendix A, the Chemistry Department website, or the [Chemistry Undergraduates Research](#) page on Canvas. Once you've identified several faculty members of interest, you can contact them individually using the recommendations below.

How do I contact professors with whom I might want to work?

Read about each lab's research and try to talk with current group members to get a feel for the personality and expectations of the faculty member. Remember that while you are trying to showcase that you will be a good fit for a specific research group, you should also find the right research group for you.

Be sure to write a personal email to the faculty member. Do not send a mass email to multiple faculty members or your email is likely to be considered spam and ignored. Your introductory email conveys an important first impression and can influence how easy it will be for you to find a lab home. In your email, tell the professor who you are (name, year at Rice), why you are looking for a position in a research lab, and why you are interested in his or her lab in particular. Describe any relevant course work or prior research experience, even if it was in high school. You also may want to include whether you are looking for a short (1 semester) or longer experience, and how many hours per week you can commit to lab work. If you are considering graduate school after Rice, include this interest in the letter. As research professors receive a high volume of emails, remember to keep your message concise.

Note: All heads of research labs have either a PhD or an MD degree and should be addressed as "Prof." or "Dr." or and not "Ms., Mrs., or Mr."

How many labs should I contact?

Getting into a lab is partly timing and luck, so do not be discouraged if your first efforts are not successful. You should expect to contact multiple faculty members (at least 5) to find a position. If you know someone in a lab where you may wish to work, ask that person to put in a good word for you. If you are not successful after several attempts, you may wish to ask the CHEM 391 Course Instructor for feedback on your initial email or to help make an introduction. Additional information about research opportunities and assistance in finding a research advisor can be found by contacting the CHEM 391/491 Course Instructor.

Are there prerequisite courses I must take before joining a research lab?

There are no specific courses required before you join a research lab; however, some principal investigators (PIs) may have their own preferences. Many students joining a lab have some background general chemistry, inorganic chemistry (can be through general chemistry coursework), and/or organic chemistry. Your experience in some non-chemistry courses (such as physics, biology, or computer science) may help prepare you for research at the interfaces of those fields with chemistry. Importantly, research is very much "on the job" training, so do not feel that you need specific courses to be a suitable candidate.

Can I conduct research at the Texas Medical Center?

Many students, particularly those headed to medical school, are interested in research at the Texas Medical Center. Chemistry majors may join a lab at the Medical center. While students can find this a rewarding experience in medical research, there are several factors to consider when making a decision about off-campus research:

- 1) Lengthy security paperwork and safety training courses are required,
- 2) Travel time to and from campus may limit time for experimentation,
- 3) Some off-campus labs may not be teaching focused or used to working with undergraduates, so additional levels of communication may be required to ensure a smooth transition.

A hybrid approach that has been successful in the past is to join a Rice lab that works closely with TMC faculty. Please see the CHEM 391/491 Course Instructor if you would like leads in these directions.

Are there paid research opportunities?

Most undergraduate research during the school year is done for credit. In many labs, paid positions during the school year are limited to lab maintenance or very routine work, and actual research will only be available for students working for credit during the academic year. However, many labs offer some paid positions over the summer. Some professors do try to set up paid research positions during the school year for students who are eligible for work-study.

Also, there are a number of competitive summer research fellowship opportunities within the Chemistry department, such as the Dr. Paul S. Engel Fellowship, the George Holmes Richter Memorial Fellowship and the Zevi & Bertha Salsburg Memorial Fellowship in Chemistry. See the Awards & Fellowships section for more information.