Research FAQ
Adapted from Dr. Kevin McCully’s “Advice on Research” for Pre-Professional Students

1. **How do I join a research laboratory?**

If you want to do research, it is important to decide what semesters work best for you. Generally, the earlier the better, and more than one semester if you enjoy your experience. In many departments more than one semester is required to earn research credit. It is best to work multiple semesters in one lab rather than one semester in multiple labs. The more in depth your research experience, the better.

The student needs to contact a research lab directly, and often the professor in the lab directly. This task can be challenging, as it may take several attempts before the professor is able to respond. Delays may not necessarily mean the lab is not available; instead, some professors wait to judge the interest and determination of the student before responding. Students often pursue 3-4 credit hours for these lab experiences, which correlates to 12-16 hours in the lab per week. There are some options that can be 1-2 credit hours; however, some professors may prefer more in-depth experiences for their students.

Below is an example of how to approach a professor about research:

```
Dear Dr. X.,

I read with interest your paper on XXX and am excited about the possibility of working with you as a research student. I am a sophomore and am interested in investing the time and effort necessary to contribute to the work. I have a 3.5 GPA and my long-term goal is to attend graduate school/medical school. Please let me know a time that I may meet with you to discuss this in person. Thank you for your time, and for considering my request.

XXX
```

2. **How do I know what lab to choose?**

Pick a lab and a professor that interest you. There are many faculty members on campus who strongly support undergraduate research and would be very happy to work with you. The project can be anything that interests you, as the topic is not as important as the experience! Even if you are definitely planning on medical school the research does NOT have to be medically oriented. You just have to like what you are doing.

The lab environment is important, so be sure to check out the lab and the other lab members. Try to find out what previous students say about the lab. Before meeting with a potential lab, look them up and try to come in with some knowledge of what kind of research they conduct. You don’t have to understand their research, but showing you looked them up is a very positive statement about your interests and your motivation.

3. **What should I expect?**

There could be weekly lab meetings, and assignments (such as a paper at the end). Often the first semester is a learning experience with more specific projects in later semesters once methods in the lab have been learned. In some labs, students analyze data or prepare reagents. Also, you may be asked to work as part of a team, which can be helpful in getting you started.

4. **When should I do research?**

As soon as you feel you want to do research (it’s never too early!), it would be worth asking around and trying to find a lab. In some departments, there are several classes that help you find research labs. If you plan to use research as part of your graduate/professional school application (including letters of recommendation), you need to have your experience at least partially completed in your junior year when you apply.

*Updated October 2019*
5. **How much time do I need to spend on research?**

A minimum of 3 hours of work in the lab per week is required for each credit hours sought. Some students, then, may sign up for 1-2 credit hours in one semester, while other students sign up for 4 credit hours for 2 or more semesters. Others (Presidential scholars) can work in a lab for their entire undergraduate experience. You can make any of these options work for you. Often professors prefer you to work in their lab for more than one semester, due to the time it takes to train you to become productive in their lab. So if you like a lab, plan on working in it for more than one semester.

6. **Can I get paid?**

Most students work for academic credit, rather than monetary compensation. While there can be paid positions in some labs, this requires experience and hard work. CURO offers scholarships that are $1,000 per semester. Ask your advisor about them as they are distributed by college. It is possible to get this scholarship more than one semester, and the money goes directly to the student. There are also CURO summer scholarships ($3,000), which provide money to do research in the summer. They are competitive and both CURO scholarships require working with a professor to write a strong application. There are also a limited number of other scholarships for research, and asking your advisors about them might be useful. Scholarships look very good on applications, as they indicate initiative and success.

7. **Do I have to do research to go to medical school?**

As of 2017: 83% of medical students at the MCG had research experience, and more than 90% of students at Emory. However, you don’t have to do research and if you don’t like it, or if you can’t find a good research lab.

Medical schools generally consider research to be a positive experience, much like volunteering for a worthwhile organization. Research oriented medical schools (like Emory) expect students to have research experience. Similarly, research experience is essential for applications to MD/PhD programs.

You should approach research as an ‘active learning’ experience. Classes with lectures are for the most part passive learning experiences, in that you are told what to learn and you are tested over that material. For research, though, there are very few required learning objectives. Instead, the learning you accomplish is up to you. This requires self-motivation and the ability to commit to accomplishing goals outside the classroom--both of which are important qualities in a medical student and future physician.

8. **How do I use research in my application to medical school?**

Medical students need very strong and detailed letters of recommendation. Get to know your professor well enough so they can write a strong letter for you. Be able to talk about your experience. Prepare an ‘elevator speech’ on one or two of your experiences in the lab. This would include what you learned and how your research ties in with your interest in medicine as a career. Prepare several different specific experiences you can use as examples from your lab work. Write them down so that you can remember them later when you are on an interview. Picking several different ones gives you flexibility to match your experience to the interests of the interviewer. For example, some interviewers might be interested in your methods and others the patients or diseases you studied. The bottom line is to show interviewers that you were more than a pair of hands in the lab and that you are in intellectual control of the work.

9. **What if I am a Pre-PT student?**

Physical Therapy schools also value research. Since the transition to the DPT degree, these schools desire students with research experience, as it gives them a stronger research oriented background going into DPT school. Again, though, research is not required and thus the advice presented above is applicable to pre-PT students.
10. **What if I'm interested in another health profession, such as Pre-OT, Pre-Dent, Pre-PA, or Pre-nursing?**

Research may not be as important (with perhaps the exception of Pre-Dent) in regards to the admissions of some of these healthcare fields; however, the same advantages (listed above) of doing research will benefit all pre-health students.

11. **Will research help me to obtain strong letters of recommendation?**

Students often need letters of recommendation, and for medical school, these letters must be excellent. Working in a lab is a great way to obtain a letter from a faculty member who knows the student. It is important to take advantage of being in a lab to get to know the professor, and to provide the professor with positive ‘ammunition’ that can be used in a letter of recommendation. Asking questions in the lab, talking over results of experiments, showing curiosity, hard work, and interest in science are impressive and noteworthy to professors. Also, demonstrating the ability to work with others is valuable and does not go unnoticed.

12. **What is the value of publications and presentations?**

It can be hard for an undergraduate to be on a peer reviewed publication; however, this would be a fantastic addition to a resume. Research can provide students with opportunities to present at scientific meetings both within, and outside of, UGA. These opportunities can be very positive learning experiences and can strengthen a resume, as well as a student’s network. While these experiences are valuable, presentations outside of UGA are not routine, so the student needs to express interest to pursue such possibilities. Similarly, publications often take time and thus interest in these must be conveyed to the professor, but motivated by the student. Please note that by the time these documents are published, the student has often already gone through the admissions process. Publications look great, though, on post medical school applications.