

you walk? The best evidence is of course that you've already done it. That you've been successful in a research environment. This means you should get involved in research as an undergraduate and you should get a strong letter of recommendation from the faculty supervising your research (see Chapter 8).

Undergraduate Research: The Most Important Thing You Can do for Your Application

What type of research should you get involved with? If possible, get involved in a project where you function as more than simply an extra set of hands. What looks better: A student who joined a large lab and who helped run errands for graduate students and postdocs or a student who joined a smaller lab, had his/her own small research project, and presented the result at their local undergraduate research showcase? The second student looks better because they have experience conducting research. The first student was simply in the vicinity of research and while this student may have learned a lot, there's a difference between passively learning and actively getting things done. If the second student does a good job they will be able to get a strong letter of recommendation from his/her advisor. This letter will describe the student as having the types of skills the admissions committee is looking for and it will provide situational examples where the student demonstrated those skills. If you're lucky the letter will describe your performance as similar to that of a first or second year graduate student. This clearly tells the admissions committee that you are ready.

You should look for a research experience where you can make an intellectual contribution. Finding an opportunity like this can be difficult, especially on the first try. You may need to take a more passive research role for a semester or two before you are assigned a research project of your own. During this time, you should be extremely ambitious. You should read all assigned papers (and probably more), you should spend more time in the lab than required, and you should engage in intellectual discussions with the graduate students in the group. Be careful not to go over the top. Look for subtle cues to determine if you're getting in the way. Grad students and faculty are busy and although they enjoy interacting with you, they do need time to complete their own work.

Once you've proven yourself you can ask to work on a project of your own. It's great if you can come up with an idea on your own. Because this is a difficult skill to learn and because your advisor likely has their own research agenda, it's likely that your advisor will modify your idea or push you towards something different. That's ok. Your advisor has significantly