

## How to Approach a Professor To Work in a Laboratory

Theresa M. Duello, PhD  
tmduello@wisc.edu

### 1. **The resume.** First, get help with your resume. Or better yet, create a **curriculum vitae**.

A resume is a one-page summary of relevant job experience and education. It is a way for employers to do a quick screen of applicants.

A curriculum vitae (CV) is a history of a person's professional life and qualifications. There is no page limit. This is what scientists use. Create one now and continue to update it through your entire career.

Check out how to convert a resume to a CV at 'Undergradadvising.com' under 'Undergraduate Advice'.

### 2. This is your first opportunity to impress, so tell them everything you want them to know. Do not 'hold anything back' thinking that you want to say it in person (because you don't know if you will get to interview). If you don't have a category for something, invent one. Use as many pages as you need. If you have the information to sell yourself, put it down.

Rule 1: Always give a professor your contact information on the resume/CV, because professors have poor memories and will need to contact you. It's the old 'absent-minded professor' stereotype.

Rule 2: Never use a piece of paper smaller than 8.5" x 11". We lose Post-It notes and 3x5 cards. Look at how messy some of our offices are!?

Rule 3: List your references with their contact information and state your relationship to them. Sometimes students think if they withhold the names of references (References on request), the professor will 'have to' call. The chances are greater that you will just be passed over for someone equally qualified who provided the information and saved the professor some time.

Note to freshman: No, professors do not expect you to have had prior research experience. They expect to train you. No, they will not ask you for references. They may or may not ask an upperclassman for references.

### 2. **Do a little research to find out about the professor's research before you meet her/him.**

There are many ways to find out about a professor's research without a huge investment of time. You do not have to have read all of their publications. Just know a little bit. A few keywords.

- Check web sites for the various graduate programs on campus, see if the professor is listed, and read what it says about him/her.
- Check out Dr. Duello's list that has graduate programs grouped by topics. (tmduello@wisc.edu)
- Search the 'Community of Science' database through the UW Libraries. UW Libraries > Databases > COS Pivot > Select 'Search/Browse by Institution' > search by research topic > select a scientist > see what they are studying.
- Do a PubMed search of the scientific literature. UW Libraries > Database > PubMed > Search the topic and combine that search with one for 'University of Wisconsin Madison'. There is a tutorial on the PubMed website. UW libraries also offer free training on how to use the literature databases and they will be happy to do presentation to small groups. This database is available

on the Internet, but if you go through the UW Libraries, you can have articles delivered to you electronically.

3. **First attempt at contact.** You can send an email introducing yourself, indicating an interest in the professor's research, indicating that you are looking for a research experience, and asking if it is possible to make an appointment to meet. Attach a 'polished' resume/CV.

Email example:

Der Dr. \_\_\_\_\_ or Professor \_\_\_\_\_,

I am a sophomore student in the New York STEM Posse who is currently taking Biology 152. In addition, I am an Undergraduate Research Scholar seeking an opportunity to conduct research. Dr. Duello, one of my advisors, recommended I contact you as I am very interested in your studies of \_\_\_\_\_. I have \_\_\_\_\_ hours a week available on Tuesdays from 1-4 and Thursdays from 12-3. I am very eager to start my research career and hope to hear from you regarding positions in your laboratory.

Thank you for your consideration.

Sincerely,

Jill/Joe Schmoe

A professor may or may not respond. If he/she does not respond, do **not** be disheartened and do **not** give up. Professors may receive hundreds of email messages each day, so if they do not read yours, it does not mean you should not persist. Persist, persist, persist! Instead give it a few days and call them. If you get an answering machine, leave a message indicating you wrote them an email.

If you do not reach them, stop by their office or lab in a few days and say you are following up on your email. If you catch them in their office, GREAT. If not, leave a note or talk to a postdoctoral fellow (PhD), graduate student, or the lab manager to see about possibilities to conduct research.

If a position is not available, ask if they can recommend another laboratory, perhaps the laboratory of a research collaborator. Or ask if there are new faculty in the department who are interested in having student's conduct research. Always use this contact to create the next contact.

### 5. **The professor is actually there!**

Once you find the professor, introduce yourself (have an extra copy of the resume with you) and state clearly at the outset how much time you have available and how many credits you wish to earn. Get information about the type of work you would be doing. Don't commit right away. Listen first. Tell them you will get back to them soon.

Tell the professor that a) you would like to know more about her/his research or b) you are interested in a specific aspect of the research. You politely tell the professor from the outset what you are looking for (number of credits) and the time you have open/available in your schedule each week. Maybe you have three hours on Monday and Tuesday and two hours on Friday. Just say so. In this way you avoid the professor telling you what she/he needs and then you having to say 'Can't do'.

Result: You are more comfortable.

Common calculation for contact hours conducting research:

Classroom-

1 credit = one hour lecture in a classroom  
3 credit meet three times a week

Lab work –

1 credit = ~3 contact hours (Depends on the professor. Some might say 4 contact hours.)

3 credits usually means 9-10 contact hours/week. (Not more than 12.)

Make sure you have a clear understanding of the professor's expectations from the outset, so you do not set yourself up for disappointment. Do not over-commit your time, as you have to protect the time you need to do well in your coursework. No amount of research 'makes up' for bad grades. And if you are only going to wash glassware (everybody pitches in some), politely say 'No, thank you.' (You can wash dishes at home.) You want a true research experience.

\* I sometimes ask to see an unofficial copy of the student's transcript just to see which courses they have taken. Then I know how much science background they have had and can then determine at what 'level' to start her/him in the laboratory. I am determining whether I need to give the student a great deal of background, an 'average' amount, or very little.

\* Often you will work with a postdoc or graduate student. This is fine. All of their work is supervised by the professor.

## **6. The first week in the lab.**

By the end of the first week you should be sure to know 1) the broad goal of the research and 2) the importance/significance of the research. It may take a bit longer to define your role in the project. No problem.

If you work with a postdoc or graduate student, still make a point to get some face time with the professor. Ask questions. Impress. You'll be asking this person for a letter of recommendation down the line. (Don't be afraid to ask for one. Worry about your needs. Don't worry about guarding the professor's time.)