

## **Tips and Tricks when Applying to Medical School as a Chemical Engineer from NMSU**

(Composed on January 9<sup>th</sup>, 2013 by Peter Dailey)

### **Shadowing Hours**

-I would advise getting shadowing hours done as early as possible in your undergraduate career (freshman/sophomore year), so that you truly know that you want to be a doctor. The shadowing I did in an emergency department in Albuquerque changed my entire outlook on what I wanted as a career.

-There is no set amount of hours you need to get from shadowing, though at least 50 hours is preferable. Be sure to focus on the quality and not the quantity of shadowing hours.

-Exposure to many different disciplines of medicine not only looks good on an application, but will help you decide if you want to become a doctor or pursue another career.

-UNM school of medicine looks extremely favorably on large amounts of shadowing hours, especially in the field of primary care, rural medicine, and underserved populations (minorities, the homeless, etc.)

-There is delineation between shadowing hours and direct patient contact. When shadowing you generally are not allowed to touch the patients, just observe and be a shadow. Volunteering at a nursing home where you are actually physically helping patients is a great way to claim patient contact.

### **Money**

-If you want to make a lot of money, don't become a medical doctor. As a Chemical Engineer first and foremost, I would highly advise getting good grades and going to work at a petrochemical company if you want to make a lot of cash. As a chemical engineer, you will make more money during your lifetime with little no debt, while generally working less hours when compared to a doctor.

-Depending on where you go, you can expect to have between \$75,000 and \$300,000 of debt when you graduate from medical school. Don't let this scare you off, your earning potential more than makes up for the increase in debt. Refer to the bullet above about making money if that is your primary goal.

-Going to UNM SoM is financially your best choice, and out of all state schools it is your best choice. You should go wherever you get into, however. American Medical school is American medical school, and residencies will judge you based on your Step 1 scores (first section of your boards) more so than the pedigree of your school

### **The MCAT**

-Look to take your MCAT early in the spring semester of your junior year (January/February timeframe). This should give you a time to retake if you have to, and still submit your application at the earliest possible date.

-The MCAT is a logic test first and foremost. It is something that you MUST study for. From your chemical engineering education alone, you generally will do alright (score around 27-29/ ~60<sup>th</sup> percentile), but not exceptionally well (30+, 75<sup>th</sup> percentile). I would recommend taking an MCAT class if you have trouble with these types of tests, they are proven help your score significantly.

### **AMCAS and Secondary Applications**

-Your application must be started in May and submitted the earliest possible date, currently June 1<sup>st</sup>. I cannot stress enough how much of an advantage it is to apply as EARLY AS POSSIBLE.

-Your best chance of getting into a medical school is in-state and UNM School of Medicine. We are fortunate to have an exceptionally ranked school that only accepts in-state applicants. From past numbers, you must be around top 30 to 40 percent of the applicants in the state to get into UNM SOM. Actual admissions numbers can be looked up on their website.

-Research experience is a plus, but not a necessity. Getting your name on a paper is quite beneficial, depending on the school. Top schools such as Harvard, Yale, UCSF, etc. are exceptionally big on research.

-Leadership experience is also a plus. Try to become involved in some organization early. Become the president, or even start your own organization from something you are passionate about. Admissions committees want well rounded applicants, and this is one way to show that you aren't an egg-head and are generally nice to be around.

-As a chemical engineer, you will have a lot of engineering courses that will count toward your "science" GPA! The AMCAS judges courses by content and not by the college they are offered in. For example, your data analysis course, both thermodynamics courses, kinetics, and most transport phenomena courses can count toward your science GPA. Classify them in your course list as chemistry, math, or physics courses to receive credit from them towards your science GPA.

### **Personal Statement and Secondary Essays**

-Start on your personal statement early. It should go through at least 10 revisions before it is in its final form. I will provide my personal statement as a guide, though it is not the only way to go about writing your statement.

-Generally the prompt for the personal statement is "Why do you want to become a doctor?"

-When writing your personal statement and secondary application essays, make a claim and back it up. It is okay to say that you want to help people, as long as you have done things to show it (e.g. worked at a nursing home, volunteered at big brothers big sisters, etc.)

-Choose schools and tailor your secondary applications to them. For example, in applications to Harvard and Stanford I stressed my academic achievement and research experience, whereas for New Mexico I stressed my connection to the state and volunteerism/direct patient contact. Look at the mission of each school and tell them why you are such a good fit for their program, backed up with evidence.

-You can go on to websites such as <http://forums.studentdoctor.net/> and find most prompts for secondary essays used from past years, allowing you to pre-write your secondaries. I would suggest doing this, allowing you to submit everything as early as possible.

### **Letters of Recommendation**

-You are allowed up to six letters of recommendation per school. I would get one from a professor where you did well in their class, a research mentor, a doctor that you shadowed, the pre-med advisor, a supervisor from direct patient contact (nursing home, etc), and professor/leadership mentor. This list is an extremely loose guide, but will usually cover what most schools will request from you in regards to letters of rec.

-When asking for a letter, be sure to ask for a STRONG letter of rec from your letter writers. Use those exact words. "Will you write me a *strong* recommendation for my application to medical school?"

-Make sure that you request letters of rec early when the application opens up, around the start of May.

-This may sound odd, but you should be writing a rough draft of your letters or recommendation for each of your letter writers to use. They may use it, discard it, or do whatever they wish with it. What this does is gives them things that were important to you and may remind them of things that they have forgotten.

-When writing your rough draft letters make sure that you follow the same rule of making a claim and backing it up with evidence of you executing your claim.

### **Interviews**

-If you are fortunate enough to receive an interview, congratulations! When an institution invites you to an interview, it generally means that your grades, GPA, and MCAT score are more than good enough to receive admittance to the school. They are now trying to hash out who will be the best fit for their program.

-Be professional and use the skills you have learned through AChE and other professional organizations to conduct the best interview possible.

-Know your application backward and forward. You should know everything that you wrote in your primary application, personal statement, and secondary application essays. Be able to explain your reasoning.

-Be sure to be yourself, always be positive, and most importantly constantly convey your passion to become a doctor, backed up by your activities. You have put in the work, now is the time to shine.

### **Odds and Ends**

-Meet with the pre-med advisor at NMSU to seek additional guidance. It is his job to help you be successful in your quest to becoming accepted to medical school. It is designed for you to have extra resources available to you as a Chemical Engineer, but do not take for granted the traditional resources available for you. Some schools want a letter from the pre-med advisor on campus.

-Don't spend too much time on studentdoctor.net, they are generally a bunch of neurotic pre-med students who are in the same position as you are, and have no idea about anything. Use it as a resource with a grain of salt.

-You have an advantage applying as a chemical engineering over a typical pre-med (major in Biology, biochemistry, etc.). Exploit this by showing that you have a diverse view and approach to problems.

-If you want to apply to any Texas medical school, know that they have an application that is different from the AMCAS (Called TMDAS).

- An advantage of a chemical engineer is that you can attain internships in industry which help you out financially during your undergraduate education as well as give you a rounded view of your best alternatives to becoming a physician. Definitely take an opportunity to intern in industry, you will learn interview skills, professionalism, and have a perspective no other applicant will have.

-Remember that this is a marathon. Whether you get in first cycle or not does not totally matter, stick to your dream, work hard, and you will most definitely succeed. This may very well be one of the most difficult things that you ever have to do as a student.