

# Major Anxiety

If you think biochemistry is your ticket into medical school, think again.

*Paul Jung, M.D.*

Premedical students, welcome to "PremedRx"-a new column that will discuss issues that affect your life, such as the medical school application process, the Medical College Admissions Test (MCAT), extracurricular activities, career options and much more. In this first installment, let's start with a simple concept-one that will serve as a recurring theme throughout the column-and that's promoting your unique individuality. This may sound like some hokey, new-age mantra, but it's a serious idea that most premeds ignore to their ultimate disadvantage.

**Dare to Be You.** Don't make the mistake of attempting to conform to some idealized version of the standard premed. You're probably familiar with the stereotype: a biology major with a 4.0 grade-point average (GPA), 11 or greater on the MCAT, volunteer time at the local hospital and research experience over summer vacation. Although this applicant may be standard, keep in mind that synonyms for standard include ordinary, typical, common, plain, average, unexciting, uninteresting, unremarkable, unexceptional and boring.

A successful medical school application endorses your unique individuality, separating you from the rest of the pack. Don't waste your time demonstrating your ability to emulate other standard premed attributes. Instead, spend your valuable time cultivating your own abilities. In 1998, there were nearly 56,000 medical-school applicants for approximately 16,000 first-year seats. Do you really think the accepted applicants all fit the standard stereotype? Of course not. But first things first. Let's start at the beginning: your college major.

**Blinded With Science?** Your college major is probably the most obvious and outright opportunity for you to distance yourself from the standard premed stereotype. Surprisingly, countless premeds enter college and insist that a science major should not only prepare them well for medical school but also boost their chances for admission. Ironically, as scientists, if they were to seek out the facts, they would easily dismantle their misguided assumption. Take, for example, the 1998 statistics from the Association of American Medical Colleges-the organization that runs the American Medical College Application Service-showing applicants' acceptance rates, broken down by major:

All majors	37%
Biology	35%
Chemistry	39%
Physics	42%
Biochemistry	43%
English	46%
History	49%
Philosophy	50%

As you can see, humanities majors have higher acceptance rates than science majors. This is a simple fact that many premeds simply ignore, as presumptions are handed down from one ill-informed class to the next. But the numbers are powerful-a 50 percent chance of admission means that a philosophy

major can fill out a med school application, then flip a coin to determine whether or not to send it in: heads, they're accepted; tails, they're not. The rest have to take their chances with even more unreliable probabilities.

Granted, there are far more science majors applying to med school than humanities majors, on the order of 14:1. And science majors do get into medical school in total higher numbers. But percentages are more important in this case because percentages determine chances.

Think of it this way. Imagine you are a med school admissions dean with 5,000 applications sitting in front of you. As you go through them, one by one, a pattern develops—one that paints a picture of the standard premed applicant, over and over and over again. An admissions dean usually asks two questions when considering each applicant: Is this person qualified for acceptance? Will this person add something interesting to the class?

Lest any of you really think that an admissions dean looks forward to admitting a class of 125 biology majors with 4.0 GPAs, think again. A medical school class is determined to be diverse and vibrant, made up of students with assorted experiences, interests and skills. By presenting the standard application—one that says, "I'm average and usual! Pick me!"—you effectively hamper the school's efforts to select a diverse class.

Now imagine running across an applicant with a major in history or philosophy. Most likely, you will immediately transfer that applicant's name to memory and take a decidedly curious interest in that application. This is what happens with admissions deans, and this explains why humanities majors have a higher chance of admission.

On another note, with regards to the idea that studying the sciences may help prepare you for the medical school curriculum, there is no added value to maximizing your science intake as an undergraduate. If it were the case, medical schools would probably encourage you to bone up as much as possible before starting school so that you don't fail out. They should also offer advanced placement credit for those advanced-level science courses that some undergraduates crave. But they don't, and the reason is that medical schools want you to be a well-developed student with a well-rounded education.

The courses in medical school are far more difficult than any undergraduate-level offering. Take one look at any medical school class preparing for final exams and you will see students with honors degrees in biochemistry struggling alongside the history majors.

So, no point in fortifying your science knowledge at the expense of your other vast collegiate opportunities. In fact, studies have shown that students of science and humanities majors do equally well in medical school and beyond. The basic minimum requirements for medical school admission is one year of biology, one year of chemistry, one year of organic chemistry and one year of physics. That's it, and that's all you need. Some medical schools may require a year of mathematics or English, but those are typically required in any undergraduate curriculum such that you'd be hard pressed to graduate without them.

So what does this mean to you? If you're at all interested in the humanities, then study them in college. Select one as your major, and do well in those classes. Take the minimum science requirements and apply to medical school. There is no compelling reason for you to jettison your personal interests for

four years in science. Some may say that you'll have very little time and few opportunities to enjoy the humanities later as a physician, so make the most of it in college. These are wise words.

Conversely, if you are truly interested in the sciences, if running gels, titrating solutions and examining shark innards are your cat's meow, then by all means you should major in the sciences. The point is that you should study what you enjoy and do well in those courses. Whether it's philosophy, biology, mathematics, economics, music, art history, physics, or biochemistry, study what you like. No major provides better preparation for medical education or medicine than any other, and you should never select a science major because of the assumption that it will give you an extra advantage in medical school or medical school admissions. The facts are clear.

**Enjoy What You Do.** The principle of unique individuality can also easily be applied to extracurricular activities. Revisiting the standard application, the most sought-after extracurricular activities among premeds include volunteering in a hospital or laboratory-no doubt to prove their empathy for patients and scientific acumen. Although these activities may be ubiquitous among premeds, there is no rule that these activities are required or necessary for admission to medical school. And there are definitely no facts to support their status as superior activities designed to amplify anyone's chances of admission. So why does every premed aspire to the bedpan and autoclave?

Again, it's a standard presumption passed from generation to generation. But there are plenty of medical students who have never held bedpans in a medical ward or run gels at the National Institutes of Health. And there are plenty of medical students who have performed these acts in a mistakenly painful attempt to fortify their medical school application. Again, the advice is to do what you enjoy, and do it well.

Obviously, if you enjoy volunteering in a clinic or working in a lab, do it. But how do you distinguish yourself from those standard premeds who feature identical activities in more flowery language on their own applications? Consider obtaining a qualifying mark such as "Volunteer of the Year" or prize such as a scientific publication or poster presentation at a conference. These not only prove that your activities are legitimate, but that you excel at them.

Remember, unique individuality is the key to medical school admissions. Consider your own application and what it may look like. Are you forcing yourself to conform to someone else's idea of the standard premed applicant? Or, are you really performing well at what you enjoy?