Pre-Medicine

A career in medicine offers a diverse range of opportunities to serve people in need. Medical schools are looking for bright and hard working people who understand the needs of their communities and want to make a difference in the lives of others. Physicians diagnose and treat illness, injury and disease. About one third of physicians in the U.S. work in primary care, providing comprehensive, ongoing health care to patients and families. Primary care physicians typically work in a small office, clinic, managed health care, or hospital setting. Additional study can lead to specialists, including anesthesiologist, pathologist, surgeons, oncologists, and psychiatrists.

Some people believe that high grades and stellar MCAT scores are the best and only way to assure success in the medical school application process. While grades and MCATs are important selection factors in the application process, most medical schools will look beyond the numbers to ensure that they are admitting great people, not just great students. Don't be dissuaded from pursuing your dreams because of a bad chemistry midterm, or even a failed science course. Remember that a "C" probably won't stop you from becoming a doctor, however, Cs in all of your classes will make it extremely difficult for a medical school admissions committee to recognize your ability to handle the workload found in medical school. Becoming a successful applicant to medical school depends largely upon a well-balanced approach.[1] The minimum GPA required for applying is 3.0. **Most admitted students have GPAs that range from 3.60 – 3.80.**

Taking the Right Classes

Academic preparation for medical school begins with selecting courses that meet the premedical requirements as an undergraduate in college. Although each medical school independently decides upon its own premedical requirements course list, most schools will require the courses listed below. Note: various medical schools require some additional courses. For the most accurate list of courses required by individual schools, check with the school's admissions site. Medical School Admission Requirements are also published by the Association of American Medical Colleges, www.aamc.org.

Premedical Requirements for Most U.S. Medical Schools

1 year of English	ENGL G100 + 110
1 year of chemistry (with laboratory)	CHEM G180 + G185
1 year of organic chemistry (with laboratory)	CHEM G220 + G225
1 year of biology (with laboratory)	BIOL G180 + G182
1 year of calculus*	MATH G180 + G185
1 year of physics (with laboratory)	PHYS G185 + G280 + G285 or PHYS G120 + G125
1 semester of statistics	MATH G160
1 semester of psychology / sociology	PSYCH G100 + SOC G100
1 semester / quarter of genetics	Upper Division Course: Taken at University
1 semester / quarter of biochemistry	Upper Division Course: Taken at University
1 semester of biological psychology	Highly Recommended
1 semester / quarter of molecular biology	Highly Recommended
Spanish / Asian Languages	Highly Recommended
Computer Skills	Highly Recommended
Other Coursework: (Philosophy/Ethics, Economics, Sociology)	Highly Recommended
**Note: Most schools also disallow AP/IB/CLEP credit for prerequisite science/math coursework. Some medical schools may not require an entire year of calculus. Also, some schools will require or strongly encourage additional coursework in the sciences or humanities.*	

Choosing the Best Major

What is the best major for premedical students? The answer is: *there is no best major*. Choose a major that you find most interesting, challenging and satisfying. You should study subjects that you really enjoy, and avoid choosing a major because it might "look good" on your application. No points are given for the major that you choose, however, you will probably perform better in a major that captures your interests. If you decide to pursue a non-science major, then your strong performance in the premedical requirements will be crucial.

Important for Community College Students:

If you complete all of your premedical requirements at community college, it may be in your best interest to take several upper-division science classes at the four-year institution to which you transfer. Performing well in upper-division science courses further demonstrates your ability to handle the rigorous science-based coursework found in medical school. If you are not a science major, it may still be important for you to take additional science courses beyond the minimum requirements to further support application

to medical school. [1]*Also note that some medical colleges will disallow community college coursework for fulfilling prerequisites after a bachelor's degree has been earned.*

MCAT Preparation

The Medical College Admissions Test (MCAT) is a standardized examination that most U.S. Medical Schools require for admissions. The MCAT is offered twice every year (in April and August) and it plays a very significant role in the application process. The MCAT is an obstacle to be conquered. Never fear…the secret to a performing well on the MCAT is preparation, preparation, preparation. The current MCAT includes multiple choice sections in Biological, Physical Science, Verbal Reasoning, and a Writing Sample (2 essays). Starting in 2015, MCAT will have four sections, with emphasis in Biological/Biochemical Foundations of Living Systems, Chemical and Physical Foundations of Biological Systems, Psychological/Social/Biological Foundations of Behavior, and Critical Analysis and Reasoning.

Clinical Experience, Research, Work Experience and Community Service

Clinical experience is strongly recommended for medical school admissions, and can include paid or non-paid work in a doctor's office, clinic, or local hospital. Research is becoming increasingly important for admissions. Experiences can include volunteering for a professor's lab, lab assistant positions in a university or hospital/pharmaceutical company, or summer internships.
Work experience can show a different set of skills, including communication abilities, problem solving, time management, and commitment.

Medical School Application Process

1. Meet minimum Requirements: Bachelor's degree for most all applicants, prerequisite coursework, MCAT scores (within 3 years of application.
2. Apply to universities (MCAT scores included). Those deemed competitive are asked to complete a supplemental application with additional information and documentation. Includes answering essay questions, providing letters of recommendation, resume, etc.
3. Be invited to interview with selected university committees
4. Get a letter of "Acceptance", "Denial", or "Waitlist"
5. Matriculate to the university of choice where final acceptance was granted.

<u>Medical Schools:</u>

There are 128 medical schools (including Canadian schools). There are nine (10) medical schools in California

California Northstate University School of Medicine: http://medicine.cnsu.edu/	*Avg. GPA: 3.6 / 3.4 Sci*
Loma Linda University: http://medicine.llu.edu/admissions/admissions-requirements	*Avg GPA: 3.77/ 3.73 Sci*
Stanford University: https://med.stanford.edu/md-admissions.html	
UC Davis: http://www.ucdmc.ucdavis.edu/mdprogram/	
UC Irvine: http://www.meded.uci.edu/Admissions/	*Avg GPA 3.70 / 3.68 Sci*
[1]UC Los Angeles: http://www.medstudent.ucla.edu/prospective/	
UC Riverside: http://medschool.ucr.edu/admissions/	
UC San Diego: http://meded.ucsd.edu/index.cfm/asa/admissions/	*Avg GPA: 3.73 / 3.68 Sci*
UC San Francisco: http://medschool.ucsf.edu/admissions/apply/getting-started.aspx	*Avg GPA: 3.81 / 3.78 Sci*
USC: http://keck.usc.edu/education/md-program/	*Avg GPA: 3.70*

[1]This campus disallows AP credit for all required courses.

Degrees Offered: Medical Doctorate (MD). Students typically spend 4 years in academic study (Undergraduate Medical Education), including 2 years of classroom study and 2 years of clinical rotations. Following medical school study, students often complete Graduate Medical Education in specialties, ranging from 3 years in areas of Family Practice, Pediatrics, Internal Medicine, and Emergency Medicine to 4 years for OB/GYN, Pathology, Anesthesiology, Dermatology, Neurology, Psychiatry and 5 years for surgical specialties in General, Neural, Orthopedic, and Urology. Subspecialties in any area are often an additional year beyond the formal training.
Dual Degrees: Some campuses will offer joint degrees along with the MD, including a research Ph.D.; Masters in Business Administration (MBA); Masters in Public Health (MPH); and other Master's level degrees.
Residency Status: US citizen or permanent resident (permanent residents must be in possession of their resident alien card at time of application)
Median Income: $187,200. wages higher in specialty areas.

<u>Additional Resources:</u>

American Association of Medical Colleges (AAMC): http://www.aamc.org/students/start.htm
American Medical College Application Service (AMCAS): https://www.aamc.org/students/applying/amcas/
Post-Baccalaureate Medical Preparation Programs: http://services.aamc.org/postbac/