Medicine

(Allopathic (M.D.), Osteopathic (D.O.) and Podiatric (D.P.M.))

Few careers offer more opportunities for service to mankind than healthcare. When speaking of “Medicine”, we are usually referring Physicians—professionals with an M.D., D.O. or D.P.M. degree and possessing advanced, highly technical training and licensure in the care of humans.

Physicians owe their patients compassion, competence, cultural sensitivity and honesty—successful pre-medical students cultivate these traits during their undergraduate years. Entrance to the career requires completion of medical school (which typically takes four years beyond undergraduate work) plus three to seven more years of residencies and/or fellowships. Limited numbers of students admitted foster competition for enrollment, though the number of available seats in Medical schools (U.S. specifically, but also internationally) have been increasing in recent years.

Good grades alone *do not* guarantee admission to a medical school; but poor grades do prevent it. Students who are truly motivated toward a career in Medicine seek to achieve; they energize their study habits into actual performance and learning, and direct their energies toward desired outcomes. Such student do not merely talk about this career—the actively work to achieve it.

Incomes of physicians are in the upper decile (10%) of all incomes in the U.S., with a median income of approximately $185,000 for all physicians.

**Allopathic Medicine**: Allopathic Medical school leads to an M.D. There are about 140 Allopathic Medical schools in the U.S. Seventy percent of U.S. Allopathic Medical schools have 2000 or more applicants for as few as 100 seats; the average number of applications submitted per applicant is fourteen. In 2014 (the latest year for which there are data), 20,343 individuals matriculated at U.S. Allopathic Medical schools, out of 21,355 accepted from a total pool of 49,480 applicants.

**Osteopathic Medicine**: Osteopathic Medical school leads to a D.O. There are about 45 Osteopathic Medical schools in the U.S. with new schools, or branch campuses, opening yearly. Programs and requirements closely mirror those of Allopathic medical programs. Total enrollment is about 24,000; accepting approximately 7,000 students a year. In 2015 there were 20,500 applicants; the average number of applications submitted per applicant is nine.

**Podiatric Medicine**: Podiatric Medical school leads to a D.P.M. There are about 10 Podiatric Medical schools in the U.S. They focus on the prevention, diagnosis and treatment of diseases, injuries and deformities affecting the human foot and ankle. Total enrollment is about 2,500 and they admit about 650 students each year.

**Medical School costs**: Cost for attending Medical school range widely. One year’s full tuition, fees and cost of living for an out-of-state or private college student can be as high as $125,000 per year (e.g. University of South Carolina); in-state costs can be as low as $45,000 (e.g. Brody School of Medicine at East Carolina University). For the 2015 Allopathic graduating class, the average debt was approximately $185,000; $210,00 for Osteopathic.

**Medical Programs in Georgia**:

Allopathic (M.D.)- Emory University School of Medicine (Private; Atlanta); Medical College of Georgia at August University (Public; Augusta); Mercer University School of Medicine (Private; Macon)

Osteopathic (D.O.)- Georgia Campus- Philadelphia College of Osteopathic Medicine (Private; Suwanee); Proposed: Philadelphia College of Osteopathic Medicine (Private; Moultrie)

Podiatric (D.P.M.)- None.

**Admissions**: Due to state funding patterns and regulations, and some agreements among states, applicants are most likely to be admitted to medical school in their state of residence. Gaining residency in another state for the purposes of medical school admission and to receive in-state tuition can be very difficult. In 2013, 62% of Medical students entered programs within their own state of residence; many of the remaining 38% enrolled in private schools, which generally focus on geographic diversity.

For Allopathic medical programs, about 50% of current Medical students are women. The Census Bureau estimates the percentage of underrepresented minorities in the nation’s population to be 19.4%; yet about 10% of all current medical students are from these groups. Osteopathic and podiatric numbers are similar.

Efforts have been taken to increase those numbers.

Successful Admission to a Medical program requires demonstrated ability and experience in multiple areas. Excellence in one (e.g. grades), but the omission of another (e.g. experience) will almost certainly result in disappointment; *all* are important.

1. **Grades (and major)**: A very high G.P.A. is important, but not as vital as most believe. Medical school admissions counselors often use the word “holistic” in how they approach the evaluation of candidates. Naturally, acceptance rates for students with G.P.A.s less than 3.2 are low. However, other factors are, and will, be taken in to account. Surprisingly, acceptance rates for students with 4.0s are not as high as you would assume. In short, strong grades are important (3.2+ GPA); stellar grades (3.8+ GPA) will not make up for deficiencies seen elsewhere in the application.

Increasingly schools are looking for intelligent, motivated and compassionate students. They are looking for students with the basic background knowledge (i.e. “pre-requisites”) and are expecting to “teach the rest”. That is, the selection is major is not as important as most would assume. So long as a student has the pre-requisite courses (regardless of whether they are part of their major or not), medical schools are satisfied. In other words, a “Pre-Med” major is *not* required (and is a determent in some circles) and there are numerous stories of Philosophy, History, Chemistry, Business majors being accepted to Medical schools. They merely took the additional coursework and performed the other requirements to successfully apply to Medical school.

**Your major at Oglethorpe**: Traditionally, students accepted to Medical school have majored in Biology. This is largely out of convenience-- the pre-requisites for most Medical programs are largely covered by the Biology major. However, OU has had students with majors in BioPsychology, Chemistry, Communications, History and Business all successfully apply.

1. **Pre-requisites/ Coursework**: Academic preparation requires successful completion of several items. First and foremost is a bachelor’s degree. Medical school is a post-graduate (i.e. post- B.A. or B.S.) education.

The choice of major is not very important (see A), above). In order to sit the M.C.A.T. (see below), it is strongly suggest that the student have, at the *very minimum*, completed:

 General (Inorganic) Chemistry- 2 semesters/1 year

 Organic Chemistry- 2 semesters/1 year

 Biology- 2 semesters/1 year the introductory level

 Physics- 2 semesters/1 year at the introductory level (i.e. non-Calculus)

 Sociology- 1 semester at the introductory level

 Psychology- 1 semester at the introductory level

The reality is that the more coursework preparation, the better. It is often suggested that courses in Physiology, Cell Biology, Molecular Biology, and/or Genetics are a useful addition to the list of suggested courses.

In addition, many programs have specific and specialized pre-requisites, such as Public Speaking, Calculus I, Statistics, or Accounting. Once programs are identified, it is strongly suggested that you review and prepare for any and all specific program requirements.

1. **Standardized Testing**: The overwhelming majority of Medical program require the Medical College Admissions Tests (M.C.A.T.). It is designed to assess problem solving, critical thinking, written analysis and knowledge of scientific concepts and principles. The test is scored in a range from 472 to 528; with a score in the range 505- 510 considered competitive.

Sitting for the M.C.A.T. requires preparation. Students are urged to preparatory course offered by many different organizations, including Kaplan, Princeton and ExamKrackers.

1. **Experience: Internship, Shadowing and/or Work**: A critical portion of the admissions process is the interview, often done on campus as part of an orientation and recruitment process. Interview conversations often center of the nature of Medicine as a business and avocation. It is universally agreed that these critical conversations require a foundation in experience in the work environment of the Medical professional. A brief shadowing experience, a longer volunteer internship (for academic credit or not) or a longer-term paid staff position are ways for future physicians to gain invaluable experience in the working environment of modern healthcare. In addition, it serves a goal of giving the future Medical student a taste for the work environment they will experience through their professional career.
2. **Letters of Reference (LORs)**: Internships, shadowing and/or work experience also provides the opportunity for a Healthcare practitioner (Doctor, Nurse, PA, etc…) to provide extensive and substantive comments of your professional initiative, demeanor and abilities in the form a “letter of reference” required for Medical school applications. The more in-depth their experience with you, the more in-depth and supportive of your desire to enter medical school will be their letter.

Typically, Medical program solicit up to 5 letters of reference that can include course instructors (such as professors), healthcare professionals familiar with your interests and promise, work supervisors and character witnesses.

With respect to the former (Professors), students often ask Oglethorpe Professors for letters. Unlike larger Universities that formulate a consensus “Pre-Health Committee” letter, Oglethorpe University instructors write individual letters tailored for each applicant. The small class sizes and close and extensive interactions between instructors and students means letters can be honest, extensive and rich in detail and anecdotes- exactly what medical school admissions committees are looking for. Students are encourage to cultivate a positive and productive relationship with each of their instructors in anticipation of asking for an honest (and confidential) evaluation of their academic abilities and promise for success in the Medical sciences.

1. **AAMCAS and ACOMAS (**[**https://students-residents.aamc.org/applying-medical-school/applying-medical-school-process/applying-medical-school-amcas/**](https://students-residents.aamc.org/applying-medical-school/applying-medical-school-process/applying-medical-school-amcas/) **and** [**https://aacomas.liaisoncas.com/**](https://aacomas.liaisoncas.com/) **and** [**https://aacpmas.liaisoncas.com**](https://aacpmas.liaisoncas.com)**)** The American Medical College Application Service (AMCAS) is the centralized medical school application processing service for Allopathic medical programs; the American Association of Colleges of Osteopathic Medicine (AACOM) serves the same purpose for Osteopathic medical programs; the American Association of Colleges of Podiatric Medicine Application Service (AACPMAS) serves the same function for colleges of Podiatric medicine. All three simplify the applicationprocess by allowing applicants to complete one standardized application rather than fill out multiple applications. The services open for the generation of applicant accounts and for the acceptance of data on July 1st of every application cycle. The sites calculate applicant GPAs in a standardized format, organizes the acceptance and distribution of Letters of Recommendation, and the distribution of materials to programs.
* **Post-Baccalaureate (“Post-Bac”) Programs:** A number of institutions offer, often year-long, intensive “boot camp-like” programs that help students with a commitment to admissions to Medical school but who didn’t quite make it bridge that gap and ultimately gain admissions. They often include intensive content review, coupled with targeted standardized (i.e. M.C.A.T.) exam test-taking skill development along with intensive career development and advising. These are tuition-charging programs, but scholarships and other forgiveness programs are often available; particularly for targeted demographic groups.

Programs are a mix of Masters-granting, certificate and/or simply targeted and focused and non-certificate-granting.
Programs in, and near, Georgia include:

* Mercer University School of Medicine (Macon, GA) <http://medicine.mercer.edu/admissions/preclinical/>
* Morehouse School of Medicine (Atlanta, GA) http://www.msm.edu/Education/GEBS/MSMS
* Georgia State University (Atlanta, GA) http://biology.gsu.edu/masters-biology-medical-science-mbms-concentration
* Emory University (Atlanta, GA) http://ethics.emory.edu/mabioethics/
* University of South Florida (Tampa, FL) http://health.usf.edu/medicine/graduatestudies/
* University of Miami (Coral Gables, FL) http://www.miami.edu/prehealth
* University of Florida (Gainesville, FL) http://www.clas.ufl.edu/prehealthpostbac/
* Florida State University School of Medicine (Tallahassee, FL) http://med.fsu.edu
* Lake Erie College of Osteopathic Medicine (Bradenton, FL) https://lecom.edu/admissions/apply/master-of-medical-science-application-procedures/
* University of Alabama, Birmingham (Birmingham, AL) http://www.uab.edu/msbhs
* Medical University of South Carolina (Charleston, SC) http://academicdepartments.musc.edu/grad/MS Medical Sciences/
* University of South Carolina (Columbia, SC) http://www.med.sc.edu/Post.Baccalaureate.Certificates
* University of North Carolina, Greensboro (Greensboro, NC) https://biology.uncg.edu/undergraduate/post-bacc/
* Duke School of Medicine (Durham, NC) http://medschool.duke.edu/education/degree-programs/mbs
* North Carolina State (Raleigh, NC) http://physiology.grad.ncsu.edu/
* Guilford College (Greensboro, NC) https://www.guilford.edu/post-baccalaureate-pre-medical-and-pre-health-studies
* Meredith College (Raleigh, NC) http://www.meredith.edu/graduate/pre-health
* Lipscomb University (Nashville, TN) http://www.lipscomb.edu/biology/graduate-programs
* Vanderbilt University (Nashville, TN) https://gradschool.vanderbilt.edu/postbac

 A current list of programs is available from the AAMC webpage at: https://apps.aamc.org/postbac/

**For Further Reading:**

The BEST place to start—“Explore Health Careers”: <https://explorehealthcareers.org/>

“Medical School Admissions Requirements”: <https://students-residents.aamc.org/applying-medical-school/applying-medical-school-process/deciding-where-apply/medical-school-admission-requirements/>

“American Association of Colleges of Osteopathic Medicine”: <https://www.aacom.org/>

“American Association of Colleges of Podiatric Medicine”: <http://www.aacpm.org/>

“American Medical Student Association”: <http://www.amsa.org/>