AMHERST COLLEGE GUIDE
For PREMEDICAL STUDENTS

PART II: The Medical School Application Process

November 2016
For Matriculation in August 2018

https://www.amherst.edu/mm/82413
OVERVIEW

Applying to medical school is an exciting culmination to your many years of hard work, dedication, and preparation, and a major opportunity to support and bond with your pre-health peers. At the same time, it’s a complex, demanding, competitive process. This provides you with an opportunity to understand yourself in a deeper way, to clarify why you want to be a doctor, to refine your own strategies to stay healthy, and to join with your fellow applicants from Amherst College to strengthen a sense of community and collaboration among pre-health students. Nationally, slightly less than half of all medical school applicants in any given year are accepted to allopathic medical schools. Amherst students do much better, and we want to sustain that. There are about 19,500 places in first-year medical school classes for the more than 40,000 applicants each year. This Amherst Guide for Premedical Students aims to place you among the successful 19,500. In addition, an increasing number of Amherst students and alumni apply to doctor of osteopathy (DO) schools and are accepted. Ultimately our shared goal is to launch you on becoming a great doctor.

By now you will have read and followed the advice in Part I of this Guide (at https://www.amherst.edu/mm/82412). By this coming May, you will have completed the basic admission requirements of eight lab science courses plus two English courses, plus biochemistry (with or without lab). In addition, a statistics class is now recommended, but not required at all schools. If you haven’t already taken it, you will take the MCAT exam by the end of June. A few of you may take the MCAT in July, but before doing so, be sure to discuss that with Dean Aronson or Professor Loinaz.

In addition to following the advice in this Guide, visit the Amherst Health Professions web page for useful links and information (at https://www.amherst.edu/mm/70317).

“I come from a country that understands the need for hard work to overcome past destructiveness and to escape a threatened future. But, we have also learned that miracles happen with vision and spirit. The world needs that vision and spirit still, and all the more. We are all threatened by entrenched inequality and divisions. We all must prove ourselves equal to a better possibility.”

   Nelson Mandela,
   Amherst College Honorary Degree, 2005

“We need to learn to live together as brothers (and sisters) or we shall perish together as fools.”

   Martin Luther King, Jr.

“In every clinical encounter, a person feels better. That’s the ideal of medicine, the deeper meaning of healing.”

   Bernard Lown
SOME UP-FRONT ADVICE

"Is This the Right Time for Me to Apply?"

Our most important advice is to apply only when your record is good enough to have a decent chance of success, and when you are committed to devote enough time and energy to apply successfully. Is this the “right” year for you to apply? This is a key question for you to carefully consider.

What kind of record is good enough and what resources do you need to devote to the application? You could look at it as a question of “risk factors.” For example, someone with one risk factor for heart attacks (e.g., high cholesterol) may well never have a heart attack. However, as the number of risk factors goes up (no exercise, overweight, family history, etc.), the chances of a heart attack increase.

In the same way, some applicants get in even though they have one or more risk factors for rejection. But as the risk factors pile up, so do the chances of rejection. If you are just starting the process, some items in the list below may not mean much to you, and you won't know yet about some, (e.g. your MCAT score if you haven't taken the test yet). You'll learn more as you read this Guide and go further on the path towards applying.

Here, then, are risk factors that we see every year among Amherst applicants that reduce their chances of being accepted:

- Taking the MCAT after July in the year you're applying.
- Having an MCAT total less than 510 on the new MCAT. The way that medical schools evaluate the new MCAT is still in an early phase and will likely evolve. Note: Exceptions may apply to some students, especially students from groups traditionally underrepresented in the medical profession. See Dean Aronson.
- Having a science GPA (calculated on a 4-point scale) below 3.4. Note: Exceptions may apply to some students, as noted above for the MCAT. See Dean Aronson.
- Having an individual MCAT score below the 50th percentile on any of the four sections.
- Applying to the wrong schools (state schools outside of your state or only very selective schools or not enough Amherst schools – schools that Amherst has a history with).
- Taking several required premedical science courses in summer school, not during the academic year.
- Not spending enough time writing your AMCAS application in May, ending up with inaccurate entries on your AMCAS.
- Submitting your AMCAS application after June 30.
- Missing deadlines!
- Not staying in frequent, close touch with us throughout the entire process. This includes notifying us promptly of all interviews and interview dates, sending us accounts of all interviews, and informing us of acceptances and wait list placement.
- Submitting secondary applications longer than two weeks after you receive them.
- Not giving serious consideration to also applying to osteopathic medical schools.
- Not having recent contact with doctors, hospitals, and other health professionals via shadowing, volunteering or working/volunteering in health care settings
- Not having substantial robust community service and engagement that is non-medical in nature.
- Taking the minimum number of science courses to fulfill premed requirements (2 Biology, 4 Chemistry, 2 Physics, and biochemistry) before the submission of your application.
Never taking more than one science course in any semester.

The first three factors listed above, referring to MCAT scores and grades, are very important in determining success in medical school admissions. Even the most sterling personal qualities usually don't substitute for low MCAT scores and science grades. To avoid the first three risk factors, you need to have:

- A science GPA (i.e. in Biology, Chemistry, Physics, and Math) of at least 3.4 on a 4-point scale; this is just above a "B+" average in the sciences; and
- An MCAT total score of at least 510, achieved no later than June the year you begin applying. (As mentioned, it is possible, but not ideal, to take the MCAT in July.) And, whatever the total, no individual score should be below the 50th percentile. Even with a score of 510 or higher, a section score below the 50th percentile could be problematic.

There are a number of other factors that may influence the chances of any individual student. The science GPA and MCAT thresholds are intended as guidelines, and may vary according to unique circumstances of the applicant.

Although not a risk factor for everyone, applying at the end of junior year for admission right after college graduation, rather than a year or more later, is often a weakness. Students who apply at the end of senior year or later almost always have a stronger record; they have graduated from Amherst, often with honors (often also with departmental distinction), usually with a higher GPA and more accomplishments and experience. The average age of first-year medical students in the U.S. is 24 and those older applicants haven't been sitting on a beach since graduating from college! Many have been working in labs or hospitals, showing other medically-related accomplishments, and engaging in community service - all of which make them more attractive to medical schools than someone who "only" has a good academic record and some summer experiences. Many Amherst students with strong records are successful when they apply at the end of junior year for admission immediately after graduating from Amherst. However, some who were rejected, and others who were accepted but not to the schools they were hoping for, would have done well to apply a year or two later.

DO NOT apply intending to request a year's deferment after being accepted. First, you will almost certainly be a stronger applicant in terms of grades, honors, and experience at the end of the additional year, so it's better to apply later rather than sooner. Second, some medical schools don't permit deferments or allow them only under conditions you may not meet. Third, most schools don't allow deferments at all for applicants admitted from their waiting list, and it's not uncommon to be admitted to one's top choice (i.e. most selective) school from a waiting list.

Then, once you have decided to apply, don't apply halfheartedly! We cringe when we hear a student say, "I guess I'll apply to a couple of schools this year to see if I get in, even though my record is weak, and if I don't make it this time I'll really go for it next time around." This is a recipe for frustration and failure in a process that requires a great deal on the part of the student and his or her family, as well as on the part of those at Amherst who are supporting the applications.

What often happens in this situation is that the applicant lives in hope all through the cycle, having not heard from some schools at all, or maybe being on a waiting list, until a final rejection in the late spring or early summer. By then it’s too late to do anything to remedy the weaknesses in the person's record in time for the next application cycle. The student then either must delay applying again until another year has passed so grades or MCATs can be improved, or submit a rushed, late application with weak credentials a second time, which is, of course, a recipe for another failed attempt.

“If we could change ourselves, the tendencies in the world would also change. As a man [or woman] changes his [her] own nature, so does the attitude of the world change towards him [her]... We need not wait to see what others do.”

Gandhi
Humane and competent doctors:

- Take care of their own health.
- Respect people, healthy or ill, regardless of whom they are.
- Support patients and their loved ones when and where they are needed.
- Promote health and healing as well as treat disease.
- Always ask courteous respectful questions, let people tell their stories, and listen to them carefully.
- Give unbiased advice, let people participate actively in all decisions related to their health and health care, assess each situation carefully, and help whatever the situation may be.
- Use evidence as a tool, not as a determinant of practice; humbly accept death as an important part of life; and help people make the best possible arrangements when death is close.
- Work collaboratively with other members of the healthcare team.
- Honor and respect the culture of patients and colleagues.
- Be proactive advocates for their patients, mentors for other health professionals, and ready to learn from others, regardless of their age, role, or status.

Stay in close touch with us through all phases of the application process. For example, tell us about all interviews and acceptances.

Applying wholeheartedly rather than halfheartedly means applying early in the cycle, applying to the right schools for you (including osteopathic medical schools in the “equation”), and devoting the same full attention and energy to the process that you expect the Health Professions Advisor, the Health Professions Committee, and the Health Professions Coordinator to devote to it. We expect you to stay in close touch with us throughout the whole process – up until the end of the cycle - so that we can provide optimal support for your application. We want the first time you apply to be the only time you have to apply!

**TIPS FOR THE PERSONAL STATEMENT**

- State at the beginning why you want to be a doctor.
- Build a case for your initial statement – using at most two to three personal experiences or stories. One story may be fine.
- Be specific and paint a rich picture of these experiences. Make them come alive!
- Avoid clichés, jargon, and multiple uses of “I”.
- If you talk about a personal health condition or adversity, show your resilience and recovery without being self-absorbed.
- Don’t list items from your resume.
- Be crystal-clear about why you’re applying, and close with a strong statement that shows the depth of your passion and commitment.
- **Convey that this has been a journey and how your decision has evolved and deepened.**
- Expect to write multiple drafts and make sure that everything in your statement clearly connects with why you want to become a doctor.
- Write from your heart and soul!
- Aim to inspire the reader and yourself!
- Be yourself. Don’t write what you think they want to hear.
TIMELINE

The schedule below shows what you need to do during the coming year to apply to medical school, and where to find information about each requirement in the following pages of this Guide. Use the checklist on the last page of this Guide to keep track of the many things you must do, and deadlines for doing them.

PLEASE ENSURE YOUR NAME IS ON ALL PAPERWORK SUBMITTED

NOTE: There are no exceptions to these deadlines other than very occasional special circumstances that require permission from Dean Aronson

<table>
<thead>
<tr>
<th>DATE</th>
<th>WHAT YOU NEED TO DO</th>
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<tbody>
<tr>
<td>Fall 2016</td>
<td>Start planning for the MCAT this coming winter or spring if you haven’t taken it yet. Decide whether to prepare on your own or to take a commercial review course. If you’ve already taken the MCAT and have questions about a retake, decide about that. Also, meet with Dean Aronson if you haven’t met with him in the past year.</td>
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<td><em>Read p.12, &quot;The MCAT Overview&quot;</em></td>
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<td>Nov. 15, 2016</td>
<td>Register with the Health Professions Committee. Register online on our website or email Erin Cherewatti at <a href="mailto:echerewatti@amherst.edu">echerewatti@amherst.edu</a> for the registration link. If we don’t receive your registration by December 4, 2016, we will assume you don’t intend to apply through the Amherst Health Professions Committee.</td>
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<td>Dec. 12, 2016</td>
<td>Mandatory meeting for all current student applicants will be held from 8:15 pm – 9:45 pm in the Loeb Center Events Room (College Hall). For alumni applying, you will be able to log in to the meeting via webinar, or watch it later if you are in a different time zone.</td>
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<td>January 2017</td>
<td>Return Interview Questionnaire by Tuesday January 3, 2017. Even if you filled out the same questionnaire last year and then deferred your application, you need to complete it on this year’s questionnaire, as there have been some revisions and new questions. Take your time to fill out the questionnaire, give it a lot of thought, and provide detailed and specific responses to the questions. Use the questionnaire as a framework for your personal statement and AMCAS application. The questionnaire is a very important part of the process! Start writing your personal statement. Schedule a time to meet with the Writing Center. Begin serious MCAT preparation and register for the MCAT if you haven't already taken it. Plan to take it no later than July at the very latest (preferably June) to have your score reported to medical schools in a timely fashion, or May if you want to know your score when you finalize your school list. The summer MCAT dates fill up early - plan ahead!</td>
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<td><em><a href="https://www.aamc.org/students/applying/mcat/reserving/">https://www.aamc.org/students/applying/mcat/reserving/</a></em></td>
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<td>Schedule your one-hour interview appointment with Dean Aronson. This appointment is called the “medical school interview” and all interviews are required to be completed by March 31, 2017. Send your latest resume to Erin (<a href="mailto:echerewatti@amherst.edu">echerewatti@amherst.edu</a>) before the interview. You will be able to schedule your interview as soon as you send in your questionnaire.</td>
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February 2017 By mid-February at the very latest (preferably earlier), ask four professors (or an Amherst staff member, such as a coach, as long as you have discussed it with Dean Aronson) to write a letter of recommendation for you. At least two letters must be from Amherst science faculty. Recommenders will need to upload your letters of recommendations to the new Amherst application portal by April 15. (We will send instructions later.) There is one exception to the April 15 deadline: If you are asking a professor who currently teaches you in the Spring 2017 semester (and this is primarily for thesis students, very occasionally for others), the letter is due by May 15. Give each of your recommenders a copy of the official information sheet you will receive in February. Alumni may submit a fifth letter (for a post-Amherst recommendation) as part of the letter packet.

March 1, 2017 Very Important Deadline – Do not miss it!

Waiver of right to see the evaluation letter.
List of four Amherst recommenders (5th for alumni).

Draft of near-final Personal Statement. The FINAL version is due on April 15 – no exceptions. Dean Aronson is available from March 1 – April 15 to review your personal statement with you. Submit at least a third or fourth draft by March 1, not a first draft. Please note: We are not able to offer additional personal statement review after April 15.

April 2017 Attend the mandatory meeting for applicants – date TBD (Alumni will participate via webinar).

April 15, 2017 Submit all of the following items to the Health Professions office:

- Final version of Personal Statement for Health Professions Committee – no exceptions. You will have until June to further revise your personal statement for the AMCAS application, but the committee will use the April 15 version.
- One-page final resume, saved as a Word document.

All recommendations must be received by our office by this date with only one exception: you are currently taking a class with the recommender. This typically applies to thesis students.

Purchase the 2017-2018 MSAR (Medical School Admissions Requirements) subscription from the AAMC web site. If you’re applying to osteopathic medical schools, purchase the comparable book for D.O. schools. Note: Many D.O. schools require a recommendation letter from an osteopathic physician. Erin can help you with this.

May 2017 Send thank-you notes to your faculty and other recommenders.

Review the basic sections of the AAMC’s AMCAS website for students and applicants (https://www.aamc.org/students/). Do the same for the D.O. application site. Start your data entry for the application. Allow plenty of time for entering data and writing your whole application. Request all official transcripts.

May 15, 2017 All thesis advisor recommendations (if applicable) are due.
June 1, 2017  Last date to withdraw from applying to medical school through the Amherst College Health Professions Committee for this cycle.

Deadline for sending updates to us for committee letter on the following: awards, honors, prizes received at graduation, and what you plan to do this summer (juniors) or next year (seniors and alumni).

June 2017  Submit your AMCAS (allopathic) and AACOMAS (osteopathic) medical school application as soon as possible after the earliest allowed submission date in June. SUBMIT EARLY. Important: Even if you haven’t taken the MCAT yet or haven’t received your score, you can still submit your AMCAS application. Don’t forget to check the Advisor Information System (AIS) permission box on your AMCAS application.

June 15, 2017  By this date, send us the list of schools where you are applying (both MD and DO). Remember, as stated above, many DO schools require a recommendation letter from an osteopathic physician.

Read p. 17, Selecting Medical Schools

June – Aug  Complete supplementary (known as “secondary”) applications for AMCAS schools. Very important: Turn these around quickly! Aim to return secondary applications within two weeks of receiving them.

Late July 2017  Amherst College Committee Letter (includes the summary committee letter plus the individual recommendation letters) uploaded to your medical schools. We will let you know exactly when they are uploaded.

From then on  Interviews and acceptances! Keep in touch on a regular basis with all updates. Inform us of all interview invitations and dates of interview, and send us an account of every interview. Mock interviews will hopefully be available upon request.

YOUR AMHERST RECOMMENDATION

The role of the Amherst College Health Professions Committee (HPC)

The HPC will send a recommendation packet on your behalf to each medical school you select. On the AMCAS application, this is called a Committee Letter, although in fact it is a packet. The packet will be sent to medical schools by the last week in July. It consists of a cover letter with information about Amherst College, a Committee letter of evaluation signed by Dean Aronson and Prof. Loinaz, four faculty letters of recommendation (plus a fifth for alumni), and a statistical page showing the median grades in the premedical science courses you took at Amherst. The purpose of the statistical page is to show that grades in Amherst science courses are not all A’s.

Students applying while at Amherst (i.e. at the end of junior or senior year) are expected by medical schools to apply through the HPC, rather than having individual recommendations sent separately to medical schools. Recent graduates who took at least half of their required premedical science courses at Amherst are also welcome to apply through the HPC. Students who took many premedical courses elsewhere after graduation should apply “on their own,” or through their post-baccalaureate program, not through the Amherst Health Professions Committee. The section on Letters of Recommendation (p. 10) contains more information about what is needed to apply through the HPC.
How and when to begin the process

Register online with the Health Professions office by December 1, 2016. Late registrations will be reviewed on a case-by-case basis. It is essential that you meet all deadlines. Missing a deadline – this one included – not only has a potentially adverse effect on your application but also affects the entire Amherst applicant pool. Register in November 2016 to receive application materials.

Other contact information

For questions about academic requirements, advanced standing, and letters of recommendation, contact Prof. Will Loinaz, Chair of the Health Professions Committee, at Physics Dept., Amherst College, Amherst, MA 01002-5000 (413-542-7968; waloinaz@amherst.edu).

For questions about all aspects of the application process, contact Dean Richard Aronson, MD MPH, Health Professions Advisor, at Loeb Center, Amherst College, Amherst, MA 01002-5000 (413-542-2265; raaronson69@amherst.edu).

The Health Professions Coordinator handles all paperwork for the applications. Do not send items to Dean Aronson or Prof. Loinaz unless asked to do so.

INFORMATION FOR THE HEALTH PROFESSIONS COMMITTEE

What you need to provide

The Health Professions Committee requires a great deal of information from you, including a detailed questionnaire, your personal statement, resume, and participation in a one-hour interview with Dr. Aronson. This information helps us to learn more about you and your plans to study medicine.

Résumé

Résumés should be one page in length and include the titles and dates of pertinent activities such as internships, research, volunteer work, extracurricular activities, and leadership positions. If you are a current Amherst student, it is helpful to ask a Peer Career Advisor in the Loeb Center to review your résumé prior to submission.

Interview

Your one-hour interview with the Health Professions Advisor is your opportunity to speak in detail about your interests and experiences, as well as ask questions about the application process. Contact the Loeb Center to schedule your interview, and please return your interview questionnaire and your résumé electronically, before the interview. All interviews must be completed by March 31, 2016. Alumni living at a distance may conduct this interview by phone or Skype. Students who plan to study abroad in the spring semester should contact the office to schedule their interview the previous fall semester.

Personal Statement

Submit a personal statement approximately one single-spaced page long in which you convey to us how you know you want to be a physician. Commonly, students incorporate previous experiences, stories, values, particular talents, and personal goals into this essay. When you submit your AMCAS application,
you will be asked to include a similar statement, so this can be a way to get a start on that part of your application. Here are some questions to consider, taken from previous year's AMCAS instructions: "Why have you selected the field of medicine? What motivates you to learn more about medicine? ... In addition, you may want to include information such as special hardships, challenges or obstacles that may have influenced your educational pursuits." Go to the Writing Center for help, and submit a mid- to late-draft to the Health Professions Coordinator by March 1.

**Letters of Recommendation**

Your Health Professions Committee letter will be based on four (i.e. exactly four—not more or less than four) letters of recommendation from faculty and others at Amherst College that you request, plus your personal statement, résumé, and interview with Dean Aronson. Copies of these individual letters of recommendation are sent along with the Committee letter of evaluation, which contains quotes from the faculty letters. Register with the Health Professions Coordinator before asking faculty to write for you, so you can give each recommender a copy of the information sheet for recommenders, four copies of which you'll receive when you register.

At least two of your four letters of recommendation must be from science professors at Amherst. ("Science" in this case means Biology, Chemistry, Math/Computer Science, Physics, or the Neuroscience faculty in the Psychology department.) There are no exceptions to this rule. The other two letters may be from science or non-science faculty, Deans, coaches, or administrators.

Transfer students, or students who studied at another institution on an exchange program, may obtain one of the four letters from faculty at the other institution. We do not take letters from faculty who may have taught you in summer school courses. Since what we prepare is an institutional recommendation from Amherst College, we do not use letters from job supervisors or others outside Amherst College. Ask those who know you well in an educational or scientific/medical context outside Amherst to write a recommendation and send it directly to the medical schools; supply these recommenders with stamped envelopes addressed to each medical school admissions office exactly as the address appears in the Medical School Admissions Requirements book (see p.10).

The only exception to the "four and only four" rule is that, if you are applying at least one year after graduation (i.e. you graduated in 2015 or earlier), you may if you wish include one additional letter from someone outside Amherst who knows you well in a science or educational setting since graduation. (We emphasize that this is optional.) Even if as a graduate you have the optional outside letter sent, you still must have four Amherst recommendations, at least two of which come from Amherst science faculty, in order to apply through the Amherst Health Professions Committee.

It's up to you to keep track of which recommendations have been received by the Health Professions Coordinator. Send a follow-up note to your recommenders before the due date of the letters, thanking them for their willingness to write the recommendation, to serve as a reminder for them.

**Consequences of missed deadlines**

It is extremely important to adhere to all deadlines in the application process. If you miss deadlines for submitting items to the Health Professions Coordinator or if your faculty recommendations don't arrive by the due date, your recommendations may miss our July submission date. We will do what we can for applicants who miss deadlines. However, at some point in the early summer it becomes impossible to include applicants with incomplete files in the July mailing without delaying the mailing, and we won't
delay it by even one day to accommodate a late applicant.

Once each applicant’s file is complete, it takes many more weeks for us to compose, format, and assemble the packets on behalf of our roughly 50-60 applicants each year. After the Health Professions Advisor drafts each committee letter, the four faculty members in the Health Professions Committee review and edit each letter individually. The committee members then meet to finalize each letter. Only then can the Health Professions Coordinator format and send the packets with the committee letter and individual faculty letters of recommendation. Count back in time from the July mailing, and you can see that we can't include someone in the July mailing if the applicant's file is not complete by early summer.

If you do miss the July uploading of recommendations, we will process your recommendations after the beginning-of-semester rush is over, i.e. by mid-October. This isn't optimal, but neither is it fatal to your applications. Some colleges don't send out any recommendations at all until September.

**Institutional Action**

The following is a quote from the AMCAS application question on institutional action and from the Instruction Manual:

“Were you ever the recipient of any institutional action by any college or medical school for unacceptable academic performance or conduct violation, even though such action may not have interrupted your enrollment or required you to withdraw? You must answer “Yes” even if the action does not appear on or has been deleted or expunged from your official transcripts due to institutional policy or personal petition.”

You must answer **Yes** to this question if you were ever the recipient of any institutional action by any college or medical school for unacceptable academic performance or conduct violation, even though such action may not have interrupted your enrollment or required you to withdraw. You must answer Yes even if the action does not appear on or has been deleted or expunged from your official transcripts due to institutional policy or personal petition. If you answer Yes, you must briefly explain each instance, along with the date(s) of occurrence.

Failure to provide accurate information in answering this question or, if applicable, in completing the form provided by the school, will result in an investigation. Medical schools require you to answer this question accurately and provide all relevant information. Medical schools understand that many individuals learn from the past and emerge stronger as a result. Full disclosure will enable the medical schools to more effectively evaluate this information within the context of your credentials.

If you become the subject of an institutional action after certifying and submitting the AMCAS application, you must inform your designated medical school(s) within 10 business days of the date of the occurrence.”

This question will also appear on the questionnaire from Amherst. It is very important to think about this question carefully. If you are unsure about how to answer this question, discuss it with Dean Aronson at your interview and consult with the Dean of Student Conduct.
THE MCAT OVERVIEW

The Medical College Admission Test® (MCAT®) is a standardized, multiple-choice examination given by the Association of American Medical Colleges (AAMC) and required by every medical school in the U.S. It is designed to assess the examinee's problem solving, critical thinking, and knowledge of science concepts and principles prerequisite to the study of medicine. It tests specific science and social science knowledge as well as reading and quantitative skills. It has four sections: Biological and Biochemical Foundations of Living Systems; Chemical and Physical Foundations of Biological Systems; Psychological, Social, and Biological Foundations of Behavior; and Critical Analysis and Reasoning Skills. The science material is what the AAMC assumes is covered in the minimum required premed courses, i.e. introductory and organic chemistry, biochemistry, introductory biology, and non-calculus physics. The social science material is often covered in introductory courses in psychology and sociology.

In 2017, the MCAT the test fee is $310, but fee assistance may be available if you apply in advance.

When to take the MCAT

An MCAT calendar and registration deadlines can be found on the MCAT website at https://students-residents.aamc.org/applying-medical-school/article/mcat-testing-calendar-score-release-dates/. The test is administered by a commercial testing company with test sites located around the country. Locations are available on the MCAT web site. Ideally you should take the test in time to know your scores before selecting schools to apply to; that would mean taking the test before June 1. If that isn't possible, take it in June or at the very latest, July. If you take the test any later than that, your scores will not arrive at medical schools until after the start of the admissions cycle, putting you behind applicants whose MCAT scores are known at the beginning of the application process, and adding a "risk factor" to your application (see p. 1).

Bottom line: plan ahead! As soon as possible, visit and study the MCAT website listed at https://www.aamc.org/students/applying/mcat/, to get details about locations and registration. There is also a Fee Assistance Program available for students who meet the criteria.

Most schools will accept MCAT scores up to three years old, although this can vary by school. Check the admissions websites of schools you’re interested in to see their specific policy.

Why you need to prepare

It is absolutely necessary to set aside time over many months to prepare for the MCAT exam. First, you need to be familiar with the format of the test and the types of questions and passages it contains, because these are very similar from test to test, but different from exams in Amherst science courses. Also, you have to work up the stamina required to concentrate for the duration of the test, which is longer than tests you probably have taken before such as SATs and exams in courses.

In addition, you would be unusual if you remembered everything from your introductory science courses, so you'll need to relearn some of it. Finally, a number of subjects on the MCAT aren't covered in Amherst's introductory science courses, at least not in the detail required to do well on the MCAT. Examples of these subjects include buoyancy, optics, nuclear chemistry, organ physiology, and basic immunology.

Preparing for the MCAT
There are three ways to prepare: (1) entirely on your own, (2) with a student-organized study group at Amherst, or (3) by taking a commercial review course (Kaplan or Princeton). Outcomes for Amherst premeds show that good science students can prepare successfully without taking a commercial course, but many such students take Kaplan or Princeton courses anyway. If you are not planning to take a commercial course, contact the Loeb Center in December about getting access to self-study materials and perhaps forming or joining a study group. If you do take a commercial course, you will receive all the materials and help you need - you won't have time to do justice both to a commercial course and also to materials borrowed from the Loeb Center.

1. **Preparing on your own**

MCAT practice materials are available through the AAMC on their website. Advice about preparing for the MCAT on your own can also be found on our MCAT Self Study Page at [http://www3.amherst.edu/~waloinaz/mcательstudy.htm](http://www3.amherst.edu/~waloinaz/mcательstudy.htm). Printed MCAT materials are also available in the Loeb Center Library.

Other MCAT preparation books are available; search retailers such as [amazon.com](http://www.amazon.com) for "MCAT". You may also come across used Kaplan or Princeton Review materials. In addition to outlines and sample passages and questions, these materials contain practice tests, but not actual released MCATs like the ones from the AAMC.

2. **Forming a study group**

The Health Professions office/Loeb Center encourages students to get together to form study groups.

3. **Commercial Review Courses**

Stanley Kaplan and Princeton Review will gladly take your money (over $2,000 with a possibility of small fee reduction based on income), and they do provide a service. They give you study guides and practice exams, as well as a series of classes, sometimes reported by students to be of poor quality. If you are willing to spend the money, want a structured study plan, and are worried about the exam, consider this option. For what it's worth, the MCAT folks did a study of those who did and didn't take a commercial course, and they say the study shows that the "gains derived from commercial review courses are small."
"What score do I need to have?"

Scores on each of the four main sections of the MCAT (Biological and Biochemical Foundations of Living Systems; Chemical and Physical Foundations of Biological Systems; Psychological, Social, and Biological Foundations of Behavior; and Critical Analysis and Reasoning Skills) will range from a low of 118 to a high of 132 (a 24 point range) with a midpoint of 126. The total score range from 472 to 528 has a midpoint of 500. Because the exam is so new, there is not yet data available about how MCAT scores correlate with admissions outcomes for our applicants, nor do medical schools have data on how MCAT scores correlate with the success of their students in USMLE Step I (a strong correlation between MCATs and Step I has been one of the main arguments medical schools offer for why they weigh the MCAT heavily in admissions). Many medical schools have suggested to us that until they have more experience with the new MCAT, it may weigh slightly less heavily in the admissions process.

What score is “good enough”? Under the new MCAT we are just starting to be able to answer this question as we gather data on the first cohort of applicants applying with the new MCAT. At this time, we are suggesting that applicants aim for a score of at least 510, which is at the 83rd percentile. On the old MCAT for Amherst applicants accepted to medical school for Fall 2016 matriculation, the average MCAT score was 33.2. On the new MCAT, Amherst applicants averaged a 51.3.1. Keep in mind that this is an average. We note, importantly, that individual circumstances differ, e.g. with state residency, demographic group, and other factors, and these factors are important to consider when considering the implications of a set of MCAT scores. Some applicants with very strong MCAT scores have been unsuccessful in applying to medical school, others with lower scores have been very successful. Every applicant should talk to Dean Aronson or Professor Loinaz about the MCAT scores, when they get them, to interpret the scores in the context of their full application and to consider the next steps.

If your total is less than 510, your chances of acceptance at an allopathic medical school may go down and you may wish to re-take the MCAT. Consider postponing your application for a year in order to improve your scores, and consider applying to osteopathic schools. (Students who are members of certain underrepresented groups in medicine may be successful with somewhat lower scores on their MCAT and science GPA.) As recommended many times in this Guide, don't think your life is over if you don't begin medical school just weeks after graduation from Amherst. The average age for first year medical students is 24; take your time and do it right, so your application is as strong as possible! Also, please give serious consideration to also applying to osteopathic medical schools!

By the way, the Amherst Health Professions Committee’s recommendation is completely independent of your MCAT score—we leave it to the medical schools to take the MCAT into account. We usually are not even aware of MCAT scores when compiling recommendations. However, we do ask that you check the box on the test which releases your score to us, so we will have data on which to base our advice for future applicants. Also, be sure to check the box on AMCAS that gives us access to the Advisor Information System. This is very important, enabling us to be of optimal support to you.

"If I could give one piece of advice to anyone applying to med school, it would be ‘APPLY EARLY.’ Spring MCAT, June AMCAS, return every secondary within two weeks, give [the Health Professions Coordinator] everything on time."

- Amherst graduate
THE AMCAS APPLICATION

The American Medical College Application Service provides a centralized application service to which most medical schools subscribe (notable exception: Texas state schools). Applications are done on-line and will become available in May 2017. Check the AAMC’s website, and Dean Aronson will also keep applicants who have registered with the Health Professions Committee updated by e-mail. Submit your AMCAS application early—no later than the end of June!

As part of the AMCAS application, you will request an official transcript from the Registrar using a form you will download as you work on the application. Only a student may request an official transcript, so this is your responsibility, not the job of the Health Professions Committee.

An important source of information about applying to medical school is the online book entitled Medical School Admission Requirements, published by the Association of American Medical Colleges. This book is available in the Loeb Center library. We recommend that you purchase the "2017-2018" edition. This book has important information about U.S. medical schools and addresses you may need as you apply.

Secondary and non-AMCAS applications:

It would be great if the AMCAS application was the end of it, but you will also have to complete "secondary applications." Most schools that participate in AMCAS require an additional fee ranging from $50-$100, plus additional application material. This may be substantive, such as additional essays, or it may be a trivial form to fill out, perhaps an attempt to disguise the fact that it's really the money they are interested in!

Schools that do not participate in AMCAS (a number which decreases each year and has included some of the Texas state schools) have their own forms, which you must request individually. The addresses can be found in Medical School Admission Requirements, or via the individual schools' web sites. Again, the application fees for each school range from $50-$100. Sometimes a secondary application will include a mailing label to give to your premedical committee for use in mailing its recommendation. However, this does not apply to Amherst applicants, so you should discard any such labels.

Personal Statement

The questionnaire from Amherst is a great way to start thinking about and writing your personal statement, as well as preparing you for the secondary application essays. The personal statement you prepare for Dean Aronson can be the basis for your AMCAS personal statement, but probably you will edit and revise it several times, and make sure it is within the AMCAS length limit of 5300 characters. Make the statement interesting, honest, clearly written, passionate, and grammatically correct. This is the only chance before you are granted an interview to tell admissions committees something you think is important about yourself and your interest in medicine. Some secondary applications include a required additional essay on a specified topic.

Have friends, parents, or professors read over your personal statement and make suggestions and corrections. Please consult with the Writing Center. If you are applying with anything atypical on your record, even if it doesn’t appear on your transcript, such as disciplinary dismissal or very low grades, consult with Dean Aronson about how to address these concerns in the personal statement or elsewhere in the application.
**Scheduling**

The earlier you complete your applications, the earlier they will be considered, and the better will be your chances of being accepted. Many schools have a rolling admissions process, which means that places are filled as they review and interview applicants. Many medical schools will be more willing to accept a particular candidate in October, when they have still not been flooded with applications and paperwork, than in March when there are only a few spaces remaining in the class. In addition, completing applications once the fall semester has begun (if you are applying during senior year) is a huge hassle, often taking on the proportions of a fifth class. You will be much better off if all of your applications, including secondaries, are completed **no later than September 1**! Earlier than that is even better!

**Publications**

Only a few applicants will be authors of scientific or other publications, so if you aren't, don't worry. If you are, however, it is useful to include these in your AMCAS application, especially if they are "refereed" publications—if you don't know what that is, consult your research supervisor or Prof. Loinaz. It is also important to use one of the standard citation formats. These always include all authors, the complete title, journal name, volume number, and page numbers. For example:


List "in press" publications only if the paper has been unconditionally accepted for publication, not being revised for eventual publication. Presentations at scientific meetings may also be listed, along with abstracts also identified as such. If you have a publication that you are either preparing for submission or that has been submitted but not yet accepted, you may also include this information. But it’s important to be clear that this is in process, that it hasn’t been submitted and/or accepted.

**Documenting Advanced Standing**

Occasionally an Amherst applicant will need to document advanced standing, usually in math but possibly in biology, chemistry, or physics. As noted in Part I of this Guide, many medical schools do not accept AP credit in fulfillment of requirements, especially in biology, chemistry, and physics, so you should take those courses at the college level. However, most schools that require math do accept placement, although some will ask for documentation. In that case, contact Prof. Loinaz and ask for a “math letter” from the Health Professions Committee that you can send to medical schools.

**Recordkeeping**

Keep records of the dates you send out materials and receive notification of their receipt. It is your responsibility to ensure that your application file is complete. If you have not received notification of your file's completion within a reasonable period of time, contact the school. Admissions offices sometimes misplace pieces of very necessary paper in the shuffle of thousands of applications. Your application will not be reviewed until your file is complete.
SELECTING MEDICAL SCHOOLS

Overview

When an Amherst applicant with good qualifications isn't accepted to medical school, a common reason is that the student applied to the wrong number or choice of medical schools.

Because of the competitiveness and unpredictability of medical school admissions, you need to apply to a larger number of well-chosen schools than you probably did when applying to college—the average number for recent Amherst applicants is around 15.

It is also usually a mistake to apply to too many schools (more than about 20), because you won't have time to do a good and timely job on secondary applications for so many schools. Your list should include both "reach" schools as well as safer schools based on your circumstances, as discussed below.

Choose which schools to apply to based primarily on where you have reasonable chances of acceptance, not primarily on factors such as grading system, housing, social life, or curriculum—all medical schools prepare you to pass national boards and to become a licensed physician. After you have been admitted to several schools, you'll have the luxury of selecting the one that has the curriculum, size, atmosphere, housing, etc. that you prefer.

For information about medical schools, consult the Medical School Admissions Requirements book and school web sites. Talk with Amherst College graduates who are current medical students. You need to take into account your grades and MCAT scores at the time of selecting schools (which means haven taken the MCAT before June) in relation to each school's selectivity for Amherst applicants. You can also include your own geographical preferences for particular cities or parts of the country. Discuss these issues with Dean Aronson as you formulate your school list. If you take the MCAT in June, you should still submit your application in June. You can always add schools once you receive your MCAT score a month later.

Categories of medical schools

There are approximately 145 accredited MD-granting institutions in the U.S. and 33 accredited DO-granting institutions. Approximately 80 of these could be described as "state schools," i.e. associated with public rather than private universities and usually greatly favoring residents of their particular state. Unless you have a good reason not to do so, you should apply to the state medical school(s) in your home state, since your chances of acceptance are usually higher and tuition is lower than at private medical schools. In most cases you will have as good a medical education as at a private medical school. Conversely, in many cases it is futile to apply to state schools outside your own state of residence, so that eliminates a large number of schools from your list.

However, there is not always a sharp distinction between "state" and "private" medical schools. Some nominally private ones, e.g. Baylor and the University of Miami, receive state funding and therefore favor residents of Texas and Florida respectively. Some nominally public ones, e.g. the University of Michigan, Penn State, and the University of Vermont, accept substantial numbers of out-of-state residents. To help you sort through all this when you get down to choosing which schools to apply to, consult the Medical School Admissions Requirements book.
Criteria for acceptance

If your science GPA as calculated for AMCAS on a 4-point scale is below about 3.7, or your MCAT total is below the upper 10%, it's unlikely you will be accepted at the half dozen most selective medical schools unless you are a member of an under-represented group or have very unusual personal experience or other factors. However, as long as your science GPA is at least 3.4 and your MCAT total is at least within the top quartile, that still leaves you in the running at more than three dozen private medical schools in addition to your state school(s).

Geography can enter your school choices in two ways. First, many nominally "private" medical schools give preference to applicants from their state or region of the country. Second, you can exercise geographical likes and dislikes yourself to some degree, e.g. if you just don't want to live in certain big cities, or conversely if you want exposure to rare horrible diseases and bloody trauma cases that you might not get in more rural settings!
MEDICAL SCHOOL INTERVIEWS

After reviewing applications, medical school admissions committees narrow down the pool and request interviews with those they are continuing to consider. Medical schools interview by their request only. Interviews are generally conducted from September to March or April. The percentage of students accepted from the interview pool can range from 10% to 40%.

The best pathway to a successful interview is preparation! Dean Aronson offers mock interviews each fall and winter, and has detailed handouts on the interview process. In addition, the Loeb Center offers a number of general interview preparation workshops. Think about how to present yourself, how to talk about your experiences, and what your strengths, successes, and goals are. Be yourself!

You must have a thoughtful answer to such questions as, "Why do you want to be a physician?" If it's because you want to help sick people, a fair question is, "Why should you be a physician rather than a nurse, medical social worker, or some other profession that also helps sick people?" Get to know the school beforehand by reading the catalog. Have some questions ready to ask the interviewer. Read up on current medical issues, such as managed care, physician assisted suicide, and rationing of high-tech procedures. Visit the interesting website linked on the Amherst Health Professions page that gives students' accounts of recent interviews at many medical schools, with lists of "most interesting questions" and "most difficult questions" asked at various interviews.

Schools will send a letter or email requesting an interview—some schools will ask you to arrange a date with them and others will assign a date. These assigned dates can be changed, but you should plan ahead and try to change it no more than once, so as to inconvenience the admissions offices as little as possible. If you will be in a certain area of the country for a group of interviews (e.g., during a vacation), you may call or write to schools in the area you have not heard from yet, to see if you can arrange an interview while you are in the area.

Your first interview will be more anxiety-provoking than subsequent ones. While you are interviewing, be prepared to spend money, travel and miss classes! It is the rare interviewer who is out to intimidate you. The interview is an opportunity for you to become acquainted with the school, as well as for the school to become acquainted with you. The interview format varies—some schools have teams of interviewers who interview one person at a time, while some have group interviews. The most common practice is to have two one-on-one interviews.

Some interviews are "blind," meaning that the interviewer has not seen your record or read your application. Go over your application before your interview and feel free to reiterate or reemphasize anything you have written which may be important. If you feel that you have had an unfair interview, and especially if you have traveled to the school, you can request another interview promptly. There is no shame involved and you should ensure yourself of a fair chance. If the interviewer asks improper questions (such as "How are you going to have kids and also be a doctor?" "Do you have a boyfriend/girlfriend?") you should report the incident to Dean Aronson.

If you can, contact Amherst alumni who are studying, teaching, or practicing at the school you visit. The online Alumni Directory has a list of alumni physicians.
EARLY DECISION

Some schools offer admission by Early Decision (E.D.). The deadline for applications is during the summer; check Medical School Admission Requirements for specific information. Under the E.D. program, you may submit an application to just one school. The admissions committee will evaluate your application and interview you (if you are chosen for one) by October 1. Until this date, you cannot submit applications to any other schools. If you are accepted E.D., you are obliged to enroll. However, if you are deferred or receive no decision by October 1, you can then apply to other schools.

There is a risk in applying ED.: if you are not accepted, your other applications will be submitted later than those of other students, putting you at a disadvantage. However, if you have a good record and a specific reason to attend a particular medical school, applying E.D. gives you a chance to resolve your future early in the application process. Consult Dean Aronson if you are considering this option.

REAPPLYING

The data from a decade ago, currently being updated, on Amherst students reapplying if not admitted the first time are very encouraging. Some factors which favor success in reapplying include: retaking the MCAT if your scores were not terrific (and studying to make them better), taking other science courses if your academic record is weak, and showing a sustained interest in the medical field by getting a job in the sciences, e.g. a clinical research or service job, during your interim year or years. Discuss your future plans and reasons why you were not accepted with Dean Aronson or Professor Loinaz. The Loeb Center has good listings of jobs in medical research and community service and engagement. Check the Quest database. They also have listings of alumni in medicine and science who can be helpful contacts. Call or write to schools which did not admit you and ask where your record is weakest. Sometimes Admissions staff will agree to meet with you to provide advice on reapplying.

When you reapply, the Health Professions Committee will use the same letters of recommendation that you obtained for your first application. You do not need to ask faculty to send letters again, and we don't allow re-applicants to add letters.

You will need to register with the office exactly as you did before. You will provide an updated résumé, and the Health Professions Committee will compile an updated letter that will be attached to your original application materials. You do not need to complete a new questionnaire or have another interview with Dean Aronson. Contact the Health Professions office by May 15 in order to ensure that your recommendations are ready in time for July uploading.
**M.D./Ph.D. PROGRAMS**

An MD/PhD program is a superb opportunity, but it is not for everyone. It involves a commitment of six to eight years of intensive study and research with minimum vacations, in addition to residency once you specialize. You should be very clear in your own mind about why you need both degrees in order to accomplish your career goals.

The RAMC website and the *Medical School Admissions Requirements* book provide a complete list of MD/PhD programs. The most selective and well-funded of these programs are those at the 39 schools funded by the Medical Scientist Training Program (MSTP) of the National Institutes of Health. Another 70 or so MD/PhD programs are funded internally at non-MSTP medical schools.

About 200 new students per year in the whole country are accepted to MSTP programs and Amherst students are almost always among them. The program pays tuition for both MD and PhD degrees, and provides a stipend of approximately $18,000 per year for living expenses. (If you add it all up, it comes to more than $300,000 in support!) If you drop the program midway, you must pay back the money they've spent on you.

You will also have an obligation to do research during at least part of your career after receiving the degrees. You should know what field you are interested in and apply to schools with appropriately strong departments. Apply only if you have already done substantial research, almost certainly including an Amherst science thesis. Many students accepted into M.D./Ph.D. programs are coauthors of one or more publications in scientific journals at the time they apply.

Most schools reserve some spots for second year medical students. AMCAS does not provide a service for applying to the Ph.D. portion of these programs. You will need to submit separate applications and recommendations along with the normal M.D. application materials. Interviews for these programs are grueling, usually six or more consecutive individual interviews, focusing on research you've done.

Applicants may be asked to submit a copy of Amherst recommendations to the Ph.D. portion of the program; you will need to submit completely separate applications, plus separate recommendations in addition to the Committee recommendation for the M.D. portion of the program. Interviews for these programs are grueling, usually six to eight consecutive individual interviews, complete with specific science knowledge questions. You will have to interview separately for the M.D. and Ph.D. programs, often over two days.

**FINANCING MEDICAL SCHOOL**

Medical school tuition and living expenses come from a combination of personal income, family or spouse assistance, scholarships, work, and loans. It is not uncommon for new M.D.’s to have over $150,000 in loans outstanding. Most medical schools believe that it is the responsibility of the student to pay the primary cost of medical school. Most medical schools in the United States typically require you to file the Free Application for Federal Student Aid (FAFSA) and many schools also require you to file the College Board's CSS/Financial Aid Profile form. These forms may be completed online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov) and [profileonline.collegeboard.com](http://profileonline.collegeboard.com).

In addition, schools may have their own forms to complete. Check the requirements and deadlines for each school to which you are applying. Financial aid application deadlines are typically in the early spring of the year in which you intend to start medical school. If you have particular financial aid questions or concerns, contact the financial aid officer at each school to which you have applied.

The *Medical School Admissions Requirements* book contains up-to-date financial aid information. The AAMC website also has very useful and up-to-date advice. Amherst College gives a number of Simpson Fellowships each year to students who will be attending medical school the following year. The
fellowships vary in amount, depending on academic standing and financial need. The fellowships need to be reapplied for each year the student is in medical school. For further information, contact the Fellowships Office, Converse 213.

Two federal programs grant substantial funding for medical school, and in turn require the recipient to practice where assigned for a number of years. One is the National Health Service Corps, designed to provide medical personnel in underserved rural and urban areas. The second is the Armed Forces Health Professions Scholarship Program through the Army, Navy, or Air Force. This program may also limit residency and fellowship options after you have completed medical school. Additional information about these options is available in the Loeb Center. Any student who is concerned that the cost of medical school might be prohibitive should contact Dean Aronson.

The Health Professions Advisor, Health Professions Committee and Health Professions Coordinator look forward to working with you to achieve your goal of entering medical school!