

# **Pre Medical Student Manual University of Idaho**

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<http://www.webs.uidaho.edu/alliedhealth/premed/index.htm>

The University of Idaho does not have a medical school per se. We have a good reputation, however, in preparing our students to be successful applicants to a variety of medical programs. Historically, about 74% of our applicants gain entrance into this nation's medical schools. Although this institution will have an impact on your success in pursuing medical studies, **THE MOST IMPORTANT FACTOR IN YOUR SUCCESS AS A PRE-MED IS YOU.** It is up to you to do well in courses, to adequately prepare for the MCAT, to get important hands-on experience in medical care, to do interesting things that set you apart from other applicants, to get to know your references well, and to interview well. Perhaps the most important aspect of preparing for and applying to medical school is organization. To be prepared, continuously look ahead to what is needed at the next stage of the application process. When you do apply, get your application materials in as early as possible and do not procrastinate. We can help, but ultimately, it becomes an issue of how much do you want admission to a medical program and how diligently will you work towards this goal. The following pages provide some guidance and advice on becoming a successful applicant.

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## Summary of the Most Important Things to Keep in Mind

1. Pick a major, ANY MAJOR, that interests you and keep your grades up. (Medical schools do not have preferred major or even a group of preferred majors - pick an area that really interests you.)
2. Take the basic, required pre-med sciences courses (= 1 yr biology, general chemistry, organic chemistry and physics, all with lab and some biochemistry, cell biology or molecular biology). Don't just get good grades, really learn the material -- you'll need it for the MCAT.
3. Get hands-on medical experience and convince yourself that this is REALLY what you want to do professionally with the rest of your life.
4. Do interesting things; become an interesting, unique person. Have interesting hobbies or research experience or international experience or. . . . Get involved in the community: show that you're a people-oriented person; you're passionate about some cause or activity and get involved (because it's important to you to have a positive impact on your community.) They are NOT interested in bookworms!
5. Take the MCAT in spring/early summer, about one and a half years before you hope to enroll in medical school. (Taking it earlier is ok. Taking it later is a poor idea.)
6. Apply via AMCAS (American Medical College Application Service) and/or AACOMAS (American Association of Colleges of Osteopathic Medicine Application Service) about 15 months before you hope to enroll in medical school.
7. Receive the secondary applications from the medical schools to which you are applying. Get them back promptly.
7. Prepare yourself for medical school interviews.
8. Have a "plan B" in case your application is not successful.

## Overall: What happens when?

### FIRST YEAR

### SECOND YEAR

### THIRD YEAR

Fall.....Spring.....Summer.....Fall.....Spring.....Summer.....Fall.....Spring.....Summer.....

Major in what interests you and keep your grades up ☺

Take the pre-med prerequisite courses ☺

Get hands-on experience in medicine/patient care ☺  
preferably over an extended period of time

interviews ☺

Take the MCAT  
Submit AMCAS & AACOMAS  
Receive/ return secondary applications

Solicit ☺  
letters  
of rec.

Med school

(generally mid-Fall  
through spring)

### FOURTH YEAR

### YEAR 5

Fall.....Spring.....Summer.....Fall

UI mock interview (MCAT if necessary)  
Make sure pre-req's complete  
Relax & enjoy summer  
Enroll in Medical School

Fill out  
Federal Financial Aid  
Forms

Much of this timeline is flexible. For example, it is not necessary to complete your degree in 4 years; you can easily incorporate another year prior to getting your degree. However, there are a few important aspects of this timeline you should keep in mind:

1. It's best (but not required) to have completed the pre-med prerequisite courses prior to taking the MCAT.
2. Take the MCAT 16 months (or more) before you want to enroll in medical school - not necessarily in your third year.
3. Submit AMCAS/AACOMAS applications about 14-15 months before you want to enroll in medical school.
4. Submit the secondary applications about 12-13 months before you want to enroll in medical school.
5. If you want to take time off between your undergraduate studies and medical school, it's probably best to take the MCAT prior to graduating.

Keep in mind that MCAT scores are valid for only 3 years at most medical schools. That's 3 yrs from taking MCAT to **matriculation**, not application.

## What happens at UI and when?

1. **Major in an area that really interests you.** If you are not happy with your current major, switch to one you know will interest you. Grades are obviously important and you are more likely to get good grades in subjects that interest you than in those that do not. (What kind of a GPA do you need? Successful applicants to the University of Washington School of Medicine (with which Idaho has a cooperative agreement), for example, have an average overall GPA of about 3.65. This entering GPA is comparable to those of other medical programs.) **There is no formal preference among medical schools of an undergraduate major - you can major in ANY area.** (Nonetheless, a number of the more competitive medical schools seem to favor students who are neither biology nor chemistry majors and can bring richness in intellectual diversity to their programs.) See Appendix I for a list of majors of successful and unsuccessful UI applicants since 1990 when we began to track majors.

Will it hurt your chances of being admitted to medical school if you take 5 yrs instead of 4 to complete your degree?: No. They will notice, however, if you take a very light load and it takes you, say, 8 years to complete the degree. The work load in medical school is intense and medical school admissions committees are looking for people who can handle that kind of stress. Therefore, you do need to carry a reasonable load as an undergraduate or have a very good explanation why you didn't.

What if my grades as a freshman were not so good but I've improved: will this be taken into account? Some admissions committees look no farther than your overall GPA. Some admissions committees will focus more on your recent work than those grades you got in your first few semesters of college. This is especially true if you get your applications in early in the annual application cycle (that is, in early summer, about 15 months before you want to enroll in medical school). However, many medical schools have cutoff GPAs and if your overall GPA is not at that cutoff, they won't even look at your file and see the upward trend in your grades.

**Overall advice is to take all your courses seriously from the time you set foot on campus.**

(By the way, admissions committees do NOT look favorably on patterns of "W's" on your transcript so avoid these as much as possible. A single "W" is not terminal. A pattern of W's suggests that you routinely bite off more than you can chew.)

**Double majors:** If you feel inclined to pursue a double major or a major plus a minor -- great. Assuming you can maintain very good grades, medical schools will generally be less impressed, however, by your double major (or major and minor) in Chemistry & Zoology, for example, than in Chemistry & Spanish or Biology & Philosophy or Engineering & Biology, etc. Consider a minor such as Religious Studies or Psychology which would certainly have relevance in your dealings with future patients and their families. Medical programs are looking for bright and well-rounded individuals.

2. **Prior to enrolling in medical school and preferably prior to your taking the MCAT, take the pre-med required courses.** All medical schools have a list of prerequisite courses that you must have completed prior to enrolling in medical school but not necessarily prior to applying for admission. (These prerequisite courses tend to be very similar, but not identical, among the medical schools.) We recommend, however, that you take these courses relatively early in your undergraduate studies and certainly prior to taking the MCAT. The basic set of requirements (which are not necessarily part of your major) that covers most US medical schools is:

Biology (for majors) with Lab	1 year
Physics with Lab	1 year
General Chemistry with Lab	1 year
Organic Chemistry with Lab	1 year

Lecture course in biochemistry, cell biology or molecular biology

Although there is some flexibility in this set of courses, the safest set at the University of Idaho for most medical programs is: Biology 115 & 116, Physics 111 & 112, (note: there is a Math 143 [pre-calc algebra] prerequisite to the first physics course), Chemistry 111 & 112, and Chemistry 277 & 278 plus 372 & 374 or 376. And, MMBB 300 or 380. To enroll in Chemistry 111, you must complete Chemistry 050, or receive a satisfactory score on the chemistry fundamentals examination (offered by the Department of Chemistry), or qualify according to the Chemistry Placement guidelines described in the UI Time Schedule / Directory of Classes.

**(MCAT study suggestion:** buy an MCAT study guide [typically \$40-50 early in your undergrad career and/or check out the guides on reserve under Pre-Med in the library. Then, as you take the prerequisite course work, look over the relevant sections of the study guide. If MCAT study guide questions/answers don't make sense: use your connection to the professors and TAs to help you get answers. This way, you're starting to study early with little pressure AND it helps your professors [= possible letters of recommendation writers] get to know you much better.)

Which of the prerequisite courses are the most important? Clearly all are important. Perhaps, however, a little extra consideration is given to Organic Chemistry as it is interpreted as being based on problem solving skills and not just memorization. Further, it may be an indication of your discipline: how much discipline can you muster to do well in a class that probably is not your favorite? (Studies have shown that grades in O Chem are more predictive of performance in the preclinical years of medical school than are the grades of the other required courses. O Chem is also typically the only second-level course required of premeds and, therefore, reflects a student's ability in a more competitive atmosphere.)

Most medical programs require English composition; however, since it is also required for most majors, it is not listed above. For potential concerns/problems associated with this requirement, see the section below dealing with advanced placement (AP) credit or challenging/testing out of a basic course.

Few medical programs require **math** beyond Math 143 (Pre-Calculus Algebra & Analytic Geometry). Less than 20% of US medical schools require calculus. A few medical programs require a course in cell/molecular biology. Also, the University of Nevada School of Medicine requires one lower and one upper division course in psychology. (Check with the Allied Health Advisor as to which upper division psych courses will satisfy UNSoM.)

Although not required by the majority of U.S. medical schools, a course in **biochemistry** or cell biology or molecular biology is strongly recommended. Currently only a minority of medical schools requires biochemistry or molecular biology but it is likely that this list will expand. Consider that the majority of the courses you will take in the first two years of medical school are taught increasingly in molecular terms. Without having knowledge of the vocabulary and basic concepts of biochemistry, it will be difficult to understand Pathology, Pharmacology, Immunology, Microbiology, Virology, Endocrinology, Embryology, Cell Biology, Medical Genetics, and Physiology. At present the University of Washington does not absolutely require that you take biochemistry or molecular biology. However, they DO require that you be familiar with important concepts in these areas; a list of the areas you should be familiar with for the University of Washington School of Medicine is given in Appendix XIII.

A course in **microbiology** is also strongly encouraged. This subject turns out to be one of the more problematic areas for first year medical students. You can make your life as a first year medical student much easier by having taken a solid microbiology course as an undergraduate student. Courses in genetics and physiology are also encouraged.

In addition, the University of Utah now requires a course in Diversity. Therefore, Idaho and Utah residents, consider taking Sociology 301, Introduction to Diversity and Stratification (3 cr). UI offers a number of other classes that fit this requirement – check with your advisor.

If you are not an Idaho resident, check the course prerequisites of the state-supported medical schools in your state of residency.

An excellent overall guide U.S. medical schools and their requirements for entrance is *Medical School Admission Requirements* put out by the Association of American Medical Colleges. This book is published annually and can be obtained from AAMC, 2450 North Street, N.W., Washington DC 20037-1129, tel. 202-828-0416 -- or look at a current issue in Life Sciences 237. Also, check out the Association of American Medical Colleges page at <http://www.aamc.org>

What about **Advanced Placement (AP) credit** or challenging/testing out of a basic course? Receiving UI credit in these ways can lead to a sticky situation later. For example, if you received an English SAT score of 540 to 739 or an English ACT score of 21-30, UI will allow you to skip English 101 (Introduction to College Writing) and go directly into English 102 (College Writing and Rhetoric). Further, if your English SAT score exceeds 739 or your ACT score exceeds 30, you do not need to take English 102. Even though UI will allow you to waive English composition in this manner, several medical programs will not accept this arrangement. They will indicate that you have not completed a year of writing IN COLLEGE and have not, therefore, met their prerequisites which include a year of college composition. (We've had a similar situation come up with physics. One of our students was given AP credit for the 100-level, 2-semester physics sequence. When called, one of the medical programs indicated that they would not recognize UI-acceptable AP physics credit since the student would not, in fact, have had a year of physics in college. They suggested that the student fulfill his prerequisites by taking two courses in the 200-level, calculus-based, engineering physics sequence.) *Be careful when having the University of Idaho give you AP or challenge credit.* Many schools that accept AP credit want to see additional work in the same discipline or confirmation of ability through MCAT performance in the same area.

**3. Grades: Retaking classes to boost your GPA?** Currently, the average successful GPA to allopathic (MD) medical programs is about 3.65-3.70 and to osteopathic (DO) medical programs about 3.50. Good grades are important. This raises the question of whether it is worthwhile to retake classes in an effort to boost GPA. First, UI will not let you retake classes in which you have received a C or above for credit. (Nonetheless, it is possible to go to another institution and retake such a class.) How does retaking a class affect your GPA in terms of medical school? For AACOMAS applications to DO medical programs, the repeated coursework 2<sup>nd</sup> grade is what will be used in the GPA calculation, whether or not the first attempt was a passing grade. In contrast, for AMCAS applications to MD programs, each attempt of the repeated course will be included in the GPA regardless whether or not the first attempt was a passing grade. So, retaking a course will help your GPA in terms of DO programs but to a lesser extent with MD programs. (However, don't intentionally blow a class so that you can retake it for a higher grade!)

Generally, if you don't do as well in a course as you'd like, it's preferable to take a different, more advanced class than to take the same course over again just for the grade. You do not want to give the impression to medical programs that you need two go-throughs to learn the information in challenging courses.

**Postbac courses:** If you take classes after your baccalaureate degree, you are a postbac student. If the courses you take are undergraduate courses, those are listed as Postbac courses on your AMCAS application. When cumulative undergraduate GPAs are then calculated, those undergraduate postbac courses are included. If you do a special master's program for your postbac work, those are considered graduate courses and do not change your undergraduate GPA.

#### **4. Get plenty of hands-on experience in medicine well before the application process starts.**

During the application process, you will be asked repeatedly why you want to become a physician. Indicating that you want to help people or that you've always wanted to become a physician will not convince anyone to admit you. What can convince an admissions committee is your decision based on extensive, first-hand experience in medicine. Test yourself: **WHAT HAVE YOU DONE TO CONFIRM YOUR THINKING OR VERIFY YOUR CHOICE?** If you've received extensive medical treatments, that can be part of your answer. Even so, get some hands-on experience in medicine but probably not until after your first year of college. During your first year, focus on your classes and make sure you don't 'bite off more than you can chew'. After your first year, volunteer at the local hospital or the hospital or clinic in your home town, or volunteer at Hospice of the Palouse, Good Samaritan [Retirement] Village, Muscular Dystrophy Assn. [Spokane], Palouse Crisis Hotline, People-Pet Partnership, be an EMT [contact the local fire department] or a Nurse Assistant, etc. And don't be a passive volunteer! Make it a point to speak with and get to know as many of the patients, nurses, and staff as possible. Get to know the environment well. Further, be familiar with the daily grind of being a physician. Spend quality time with physicians discussing a wide range of topics from how their practice affects their personal lives to the effects the government has on future medical care. Spend time with patients in a hospital, nursing home, clinic, etc. to make sure you can handle being around ill and infirm people. Make sure YOU REALLY want to go into medicine. If you're absolutely convinced based on what you've seen and experienced, it shouldn't be too difficult to convince an admissions committee. Also, performing such volunteer work well can lead to an important and very supportive letter of recommendation from your supervisor or an associate. Another option is to work in a health care management environment and learn more of the business concepts of providing care. Clearly the business end of care is an increasingly important determinant in what kind & extent of care is provided. Physicians need to be aware of these aspects.

Begin getting information now on D.O.s (Doctor of Osteopathic Medicine) as well as M.D.s. (<http://www.osteopathic.org/>) If you volunteer in a hospital or clinic, ask nurses (they tend to be pretty unbiased, objective and realistic) about D.O.s and get a feeling for this career option. It is certainly a very viable option to the M.D.

**5. Become a well-rounded, broadly-educated person.** Make sure your classes are going well and you are maintaining a competitive GPA. Then do interesting things. Your time before

medical school may be the last chance you have in life to really explore things outside your career interest. You'll have plenty of science in medical school. As an undergraduate, take interesting courses (outside your major), read interesting books, have interesting hobbies, get involved in interesting service activities, be a unique individual. **ADMISSIONS COMMITTEES DO TAKE NOTICE** (as long as you do have very good grades and MCAT scores) and extracurricular activities distinguish a good applicant from an outstanding applicant. For example, at the University of Utah, less than half of the applicants with acceptable academic qualifications are invited for an interview; extracurricular activities can make the difference. (In terms of outside activities and hobbies, including volunteering at a clinic/hospital, it is usually much better to do a few things really well and in depth than do many but only superficially.) Having just high grades and high MCAT scores is *not* enough! You're competing for limited seats with others who all have good grades and MCAT scores. Admissions committees really like to see that you've developed skills (such as orchid growing, playing the oboe, you've started a small business, etc.) because you have an interest and curiosity. They like to see that you do these activities well because you want to - not because some advisor or faculty member is telling you that it is necessary.

Admissions committees also like to see that you've participated in activities which benefit the community **BECAUSE IT MAKES YOU FEEL GOOD ABOUT YOURSELF TO HELP OTHERS**, whether it's medicine or not. It's easy to state in your application essays that you're committed to helping others but words are cheap, especially to cynics who review large numbers of applicant files. It is much better to show the admissions committees that you're a people-oriented person (not an introvert) committed to helping others than try to claim it in your essays and/or interviews. Seriously consider volunteering for community-based organizations rather than school-based programs. Consider soup kitchens, Big Brothers, Planned Parenthood, Stepping Stones, American Red Cross (Colfax), Palouse-Clearwater Environmental Institute, work with the local Republican/Democratic office to help get your candidates elected, periodically sing, dance, play guitar and/or juggle (perhaps with a friend or friends) for the folks at the local nursing home [they're often very bored], coach children's sports through your church or local school district, ref kids games through Moscow Parks & Rec., etc. Ideally, you want to work with the folks in need rather than a service (such as Habitat for Humanity) where you work with your peers but not necessarily with the people being serviced and actually in need. Use your imagination and follow your talents and interests. If you can, put in a couple hours per week into such volunteer activities year-round rather than pack them into your summers. When asked why you participated in such activities, you can state that you genuinely like being with others and it is important to you (maybe because it gives you an emotional lift) to have a positive impact on your community - whether within or outside of medicine. Admissions committees really like that attitude if they perceive it as sincere.

Consider doing an exchange study: do a semester or year at another institution, perhaps even overseas. Such special programs can and usually do impress admissions officials as long as you keep your eyes wide open during the experience so that you can learn as much as possible.

**Elective courses:** Again, it is important to become a broadly-educated person so take some elective classes that stretch your horizons. If you are a science major, pick electives from outside the sciences. Particularly valuable are foreign languages and especially Spanish (due to the high density of Hispanics in certain parts of this country as well as the projected increase in their numbers). Rather than take a course such as Human Anatomy & Physiology (Biology 120 & 121), use your undergraduate education as a unique opportunity to learn about interesting

topics that will not be covered in medical school. Ultimately, it will be important for you to be able to converse with patients and families on a variety of levels beyond anatomy, pharmacology, physiology, etc.

**Research** can be a very positive experience that complements your academic record. It can be intellectually very challenging and fun. It can be an excellent way to spend one or more summers. (Admissions committees look at how you spend your free time and summers.) It is also a very good way of getting to know a faculty member or research associate who ultimately can write a very supportive letter of recommendation. However, engage in research ONLY if you are truly interested in the project. Then get involved, take initiative and strive for excellence. If you are not really excited about doing research, don't do it -- do something else, anything else that's more enjoyable. Do not participate in research because you think it is expected of you -- it's *generally* not. (BTW, research experience cannot replace clinical experience – you need a good thorough knowledge of medicine and medical practice, period.) *However*, the University of Utah School of Medicine actually does require some form of research experience. This does not need to be a biology/microbiology/biochemistry type experience. Any non-class activity in which you tested a hypothesis by collecting data and arriving at a statistically sound conclusion will do. Two examples of appropriate research: 1) working for a physician and going back through clinical records to determine whether a specific treatment had the predicted outcome and 2) testing whether radio, newspaper or TV ads are the most cost effective form of advertisement for a local business.

**Honor Societies:** Honoraries and honor societies generally don't count for much. Almost every applicant has at least one; some have many but they have little impact on admission decisions. They don't hurt but they don't help much either. Admissions committees are looking for substantial accomplishments.

Numerous medical school admissions committees (including the committee at the University of Washington) will probe you and your file with respect to academic/research goals, personal goals, travel experiences, stresses and outcomes, leadership experiences, and experiences helping others: start early to become well-rounded and experienced.

As a guide, check out the self-assessment document on the University of Utah School of Medicine site:

<http://medicine.utah.edu/admissions/criteria/Self%20Assessment%202009-2010.pdf>

6. Throughout your studies, periodically look at the wealth of medical school-oriented information available to you on the Internet.

- Double-check admission requirements at desired med schools such as UW, Univ. Utah, Univ. Nevada etc. including number of students admitted and their academic profile (GPA and MCAT scores)
- Check out MD and DO (<http://www.osteopathic.org>) programs.
- Medical College Admissions Test (MCAT):  
<https://www.aamc.org/students/applying/mcat/>
- Student applicant and admission data: <https://www.aamc.org/data/>
- Applying to med schools: <https://www.aamc.org/students/applying/amcas/>
- Applying to DO schools: <http://premed.uark.edu/admission/aacomas.html>
- Shadowing physicians: <http://www.idahofamilyphysicians.org/jobs.html>
- Aspiring Docs.org: <http://www.aspiringdocs.org/>

- Summer Medical and Dental Education Program (SMDEP) for freshman/sophomores in underrepresented groups: [www.smdep.org](http://www.smdep.org)
- UW/ WWAMI program: <http://uwmedicine.washington.edu/education/Pages/default.aspx>
- General information:
  - <http://www.aamc.org/audienceamcas.htm>
  - <http://www.xmarks.com/site/www.aamc.org/audienceamcas.htm>

## Special Situations

1. What if I'm an **older applicant**? If you haven't taken the prerequisite coursework indicated above, take the required courses and *do very well*. Admission committees look closely at your performance in these courses as they are an indicator of whether you can handle the academic rigors of medical school. Also, they are leery of applicants who have been out of a classroom for more than about 5 years as these people often have a difficult time adjusting to the coursework load in medical school. In the AMCAS and secondary application essays, use your experiences to present a convincing case for why medicine -- and **WHY NOW**. If you're willing to give up a stable job and promotional opportunities for medical school, make that clear. If you've saved for medical school or are willing to sell your home to finance your education, make that clear as well. As an older applicant you will be expected to be very organized. You will also be expected to excel in the interview so take preparation for the interview very seriously.

2. Being a **minority** (African American, Mainland Puerto Rican, Mexican American and Native American) can be to your advantage in getting into medical school especially **if** you show that you have been involved in activities related to your cultural heritage and **if** you plan to be involved and help in your ethnic community after you receive your medical training. Get involved in ethnic organizations and do volunteer service in your cultural community. Freshmen and sophomores, consider getting involved in the Summer Medical and Dental Education Program (SMDEP). See information at <http://www.smdep.org/> SMDEP is a six-week, summer enrichment program for talented minority premedical students offered at, among other institutions, the University of Washington School of Medicine. It is a comprehensive and excellent program that includes overviews of basic science, workshops on time management, MCAT preparation, AMCAS applications, stress reduction, etc., and includes a mentoring program which involves visits to local hospitals and clinics. SMDEP offers each student room and board, a small stipend, and travel, if necessary. It is restricted to students in their first or second year of college and applications generally open in early November (and close in March) for the following summer. For additional information and application forms contact Office of Multicultural Affairs, University of Washington School of Medicine (<http://depts.washington.edu/omca/>).

Prior to applying to medical school, make sure you talk to current minority medical students. Also, meet with medical school administrators in charge of minority affairs (either before or during your interview visit) and check those schools to make sure that they graduate a

high percentage of the minority students they admit.

3. I'm **not a U.S. citizen**: Do I have a chance at getting into a U.S. medical school? If you are a U.S. permanent resident: Yes. However, if you are neither a U.S. citizen nor a U.S. permanent resident, you are in a very difficult situation. At state-supported medical schools, the bulk of the costs of training a medical student comes from the state legislatures. These are uniformly unwilling to support a foreign national at tax-payer's expense. Private medical schools, such as Creighton University, Northwestern University, etc., will consider you. However, it will be [almost] impossible to obtain loans since lending agencies have no assurance that you will not leave this country prior to paying your debts. Since they have no mechanisms to recover their costs, you are a poor financial risk. Nonetheless, these private schools will consider your application and grant admission *if you have sufficient personal funds, prior to admission*, to cover the *entire* period of medical school. There are two very helpful articles about international students on the NAAHP website entitled: "Medical school admission policies towards non-U.S. citizens (2009)" and "International students and medical education: options and obstacles (2004)" at: <http://naahp.org/resources.htm>

4) You're married: Make sure that you and your spouse/finance spend time, perhaps over lunch, with other couples in positions you'd like to be in 5 or 10 years down the road. If your spouse isn't going to medical school, make really sure that she/he knows what they're getting themselves into! If your spouse knows exactly what they'll be going through, they're more likely to retain their sanity through crazy times plus, they can provide very important support for you. A very difficult situation for everyone can arise if they're clueless and are caught off-guard. Be prepared during the medical school interview to explain steps you've taken to make sure your spouse knows well the situation she/he is likely to face; it is likely to be important to an admissions committee to know that your spouse is supportive of this career decision based on knowledge rather than blind hope.

### **Optimal Time Table for Applying to Medical School**

1. **You should start to prepare for the MCAT (Medical College Admissions Test) at least two years before you hope to enroll in medical school** and ideally as you are taking the science prerequisite coursework. Take a look at AAMC's MCAT Student Manual on line at [www.aamc.org/mcat](http://www.aamc.org/mcat). It is intended to familiarize you with the MCAT and provide necessary information to prepare for the test. It contains an explicit description of the content covered and sample questions that illustrate the various types of questions as well as explanations describing the reasoning used to determine the correct answer. Also, we recommend that you purchase a current MCAT study guide and casually scan its relevant sections as you take general and organic chemistry, general physics, and biology – and you'll have a professor and TAs in those subjects to help you with any questions. At least 6 months before taking the MCAT take as many practice exams as possible – with a clock! Afterwards, go back and look up the questions you missed or weren't sure about. You can obtain legitimate practice MCAT exams at AAMC:

<https://www.aamc.org/students/applying/mcat/> Also, check out the MCAT Practice exam online at [www.e-mcat.com](http://www.e-mcat.com). This site has 6 full length MCATs, with more than 1,300 items. Prepare - then, take the *Spring* MCAT! (See Appendix II for a list of rationales for taking the MCAT at this time.) Do not cram for this test and do not take one real MCAT exam for practice. The MCAT is important. It is THE common denominator among all applicants. It is designed to test your thought process (analytical reasoning, problem solving and abstract thinking - skills important for success in medical school) as well as your thought content. Whether we like it or not, most medical schools have found that despite its limitations, the MCAT is still the best predictor of student success in medical school based on criteria such as grades in medical school, scores on the U.S. Medical Licensing Examination, likelihood of finishing the MD program in 4 years, success in obtaining competitive residencies, etc. Therefore, take the MCAT exam very seriously no matter how stellar your extracurricular accomplishments, how nice and/or motivated you are, who your parents are and who they know, how spectacular your GPA, etc. (Indeed, the combination of high GPA and not-so-high MCAT scores raises a whole host of concerns among admissions committees. For example: there's obviously grade inflation at your undergraduate institution, or you're obviously bright, didn't you study? Maybe you're not really THAT interested in going to medical school, or if you're serious about med school, why didn't you retake the exam, etc.)

Hints: 1) Look at the numerous MCAT study guides on reserve in the library (See Appendix III for a list of guides and practice exams available at the Reserve Desk in our library), 2) Buy one of the MCAT study guides (from our bookstore or see the pre-med advisor) and look at it periodically as you take the pre-med required classes [biol, phys, gen chem, o chem], 3) Take as many practice exams as possible and take several of these with a clock to work on pacing, and 4) WHEN YOU TAKE THE PRE-MED REQUIRED COURSES, LEARN THE MATERIAL AND STORE IT IN LONG-TERM MEMORY! Don't get good grades in courses by just cramming for exams and fighting for points. These "skills" can't help you on the MCAT.

Some people have difficulties with a standardized exam format. However, medical school admission committees do not accept this as a valid explanation for low MCAT scores; after all, national board exams in medical school are standardized exams. If you tend to have difficulty with this type of exam (e.g., ACT, SAT, GRE, etc.) get some coaching and help with test anxiety at the Counseling & Testing Center.

Evaluate your GPA and MCAT scores realistically. Whereas a low score in a single MCAT category may be salvageable, averaging at or below the 50th percentile for the entire MCAT is highly unlikely to get you in -- no matter how good the rest of your credentials. Remember that applying to medical schools is expensive; applying with unrealistically low scores is likely equivalent to throwing your money, time and energy away. Use MCAT scores in Appendix IV-VI as guides.

MCAT is administered exclusively via computer. The Association of American Medical Colleges offers the MCAT on 20 different test days spread throughout the year, with some morning and afternoon testing appointments available. Register for the exam early to ensure that you can take the test at your preferred test site with the closest being in Spokane.

## **2. Letters of recommendation from faculty members and outside references.**

As you take your courses, keep in mind that most medical programs require at least 2 evaluations from science faculty. In addition, some want a letter from a non-science faculty member and some require a letter from a supervisor in a nonacademic setting. Develop strong relationships with **faculty mentors and other professional references**. Get to know your professors from day one, and set a goal of finding at least one professor each semester who knows you well enough to write a reference letter for summer jobs, scholarships, honor nominations, and ultimately for med school. Then, you will easily be able to choose your top 3 or 4 professors when you are ready to apply for med school.

Letters of recommendation which mention only how you did in someone's course and little else about your character, demeanor, warmth, motivation, tenacity, perseverance, goals, etc., tend to carry very little weight. ***Get to know the people who will write a letter for you and make sure they get to know you well.*** It is your responsibility to give your evaluators positive things to write about. Letters from employers or off-campus supervisors are often very enlightening and helpful, especially if they deal with topics such as how reliable, motivated, personable you are, how you get along with others, how you take constructive criticism, how well you function independently, etc. Pick evaluators that can write very supportive letters - you can be damned by faint praise.

The Admissions Committee, School of Medicine, University of Washington has formulated the following guidelines for letters. They urge that applicants suggest to their recommenders that their letters address the following:

How well do you know the applicant and under what circumstances did you have contact with him/her?

What strengths does the applicant possess? Does the applicant have any unique characteristics?

Have you observed any particular weaknesses or characteristics which you feel would interfere with a successful medical career?

How well does the applicant get along with the faculty and his/her peers?

How does the applicant handle disappointment or stressful situations?

How do you assess the applicant's emotional maturity?

How do you assess the applicant's oral and written communication skills?

If possible, please indicate reasons why you feel the applicant should or should not become a physician.

When you approach someone for a letter, ask them if they can write a **strong letter of support**. If they hesitate or do not feel comfortable with your request, approach someone else. You don't need lukewarm support letters in your application. If they agree to write a letter of support for you, give them a written resume summarizing your activities and accomplishments. Don't be too brief, however. Clearly spell out what you did, for how long, in what capacity and what you learned about yourself from the experiences. Letters from clergymen, personal physicians, family friends or persons in influential positions are seldom helpful (from U. Nebraska secondary appl.)

Solicit reference letters well before the time that you actually need them. Glitches are more common than you might think. Occasionally, evaluators will leave the UI and be hard to track down, and some will wait until the *last* possible moment to submit letters even after repeated prodding from you. This is especially true if you ask near the end of the semester when exams have to be written and graded and papers read. (Some evaluators never do submit the

letter they said they would write.) Make sure, as much as you can, that the letter is on department letterhead, generically addressed if going to several medical or OD schools, and submitted through the appropriate application process rigorously following the guidelines. Sometimes, the evaluator will forget and recommend you to an incorrect type of program! (For example, we recently received a letter recommending a student for admission to graduate school when that student was actually applying for admission to dental school. At the time this error was caught, the instructor had left campus for an unknown duration to an unknown destination.)

Give your references a reasonable, but not open-ended deadline.

See examples of helpful and non-helpful faculty-generated letters of recommendation in Appendix VII.

Once you've been accepted, thank your supporters in person.

3. **Apply to take the MCAT:** <https://www.aamc.org/students/applying/mcat/>

4. **Take MCAT at least 1.5 years before you hope to enroll. This is probably in the spring, after you've completed the prerequisite coursework.** Register early for the computer based exams: the earlier you register, the more likely you'll get the nearest testing center.

Get a good night's sleep before the exam and do your best to relax during the exam.

When taking the exam, leave no question unanswered as there is no penalty for guessing.

When do you get back the scores? It is anticipated that students will receive their scores about one month after taking the computer-based MCAT.

How long after you take the MCATs are the scores acceptable? Schools generally do not consider MCAT scores older than three years – at matriculation. Therefore, realistically, you have two years between taking the MCAT and applying to medical school.

MCAT characteristics: administered to over 55,000 students annually, the 6-hour exam consists of 221 multiple-choice items and two essays. Divided among four sections, scores on Biological Sciences, Physical Sciences, and Verbal Reasoning are each reported on a scale from 1 (lowest) to 15 (highest). The Writing Sample receives a score of 1 to 6, converted to an alphabetical scale ranging from J (lowest) to T (highest).

5. **Apply through AMCAS (American Medical College Application Service)**

<https://www.aamc.org/students/applying/amcas/> AMCAS processes, replicates and sends your AMCAS application, MCAT scores, and transcripts to all participating medical programs (as indicated on the AMCAS Designation Form). All but 19 of the 126 MD medical programs in this country rely on AMCAS for the initial portion of the medical school application. (If you are applying to non-AMCAS medical programs, you must contact them individually.)

Work on your one page **AMCAS essay**. This is a very important document that should contain descriptions of important experience and what you've learned about yourself from those experiences and gives a logical explanation for why you want to become a physician – based on your experiences. You may want to review the following web sites which provide advice for writing your personal statement: (<http://www.medadvising.ku.edu/essaytips.shtml>, <http://www.cmu.edu/hpp/achieve/pstips.html>,

<http://www.accepted.com/medical/sampleessays.aspx>, and [http://www.accepted.com/medical/5flawsmed.pdf?utm\\_source=Publicaster&utm\\_medium=email&utm\\_campaign=Sub\\_Med5FF&utm\\_term=click+here+now](http://www.accepted.com/medical/5flawsmed.pdf?utm_source=Publicaster&utm_medium=email&utm_campaign=Sub_Med5FF&utm_term=click+here+now)). You don't want your essay to be and sound like those of everyone else, however, you're probably much better off emphasizing your unique *set* of experiences, talents and activities rather than try to stick out by using a bizarre font or prose or quote. Make sure the logic is sound, compelling, and clearly written. Avoid exaggerations and hyperbole. NO SPELLING ERRORS. NO GRAMMATICAL ERRORS. Don't have too many "I's" in the essay (for example, 17 is way too many - *admissions committees will actually count these*) - too many pronouns is a Negative. Have at least one objective, unbiased person read the essay and give you feedback. If possible, have an English instructor or teaching assistant review your essay. This essay will be sent to every AMCAS medical school to which you apply so put serious time and effort into it. BTW, most interviewers will not know your grades or MCAT scores at the time of the interview but they will have access to your AMCAS essay.

What about a religious emphasis in your essay? We suggest that you write the essay as if you were writing to all your potential patients. Some of your patients may be Jewish, Muslim, Buddhists, non-religious, Christians of all kinds and so on. As a physician, you should want to be inclusive of your patients; your statement needs to be inclusive as well. In your essay, use terms that are universal – your humanitarian focus, compassion to help others, and an inner motivation etc. Your language needs to be inviting to all and not a put off to any group. Isn't that what medical practice is all about?

If you are planning to apply to one or more of the 30 osteopathic medical programs, obtain the AACOMAS application forms from <http://www.aacom.org> (Hint: Make sure you emphasize primary care in your AACOMAS personal statement.)

To complete the "Academic Record" part of the application, you must have transcripts from each college where you've taken courses. Request personal copies of your transcripts early in the application process. Verify that these are accurate and include your latest grades. Then have the registrar at each institution forward a set of your transcripts directly to AMCAS/AACOMAS. The transcripts must arrive by 1 August for Early Decision applicants or within 14 days after application deadlines for regular applicants. (You must download the AMCAS transcript forms from the web site of the AAMC: <http://www.aamc.org/>)

Keep a copy of *everything* you submit back to AMCAS/AACOMAS for your records. Review these documents just prior to going on your medical school interviews.

**6. Submit the completed AMCAS and AACOMAS applications as early as possible.** (You may want to wait until you see your MCAT scores before submitting the AMCAS/AACOMAS applications. Once you've gotten your scores and are comfortable with them, submit the AMCAS/AACOMAS applications as soon as possible thereafter. At the end of this letter, we summarize the MCAT scores of our successful and unsuccessful applicants since 1991 in Appendix IV-VI.)

**APPLY AS EARLY AS POSSIBLE.** (Applying to medical school is not like paying your electricity bill where all that matters is payment by the due date. Applying early can make a big difference in the success of your applications to medical school. See arguments in Appendix II.)

You've submitted AMCAS/AACOMAS but you're really not happy with your MCAT

scores, you're planning to retake the exam and you want the schools to consider your new scores – what to do? AMCAS: go to the question about anticipated MCAT test date and change it to reflect the new test date. This can be done even after AMCAS has been submitted and verified. AACOMAS: go back into your application and at the tab for “MCAT”, update with your next “planned” MCAT test date. This will automatically update your AACOMAS application and osteopathic programs to which you've applied will receive an updated application as well.

**7. To which schools do I apply? It depends.** If you're a Michigan resident, certainly apply to the Michigan State University School of Medicine but applying to the University of Washington, University of Utah, University of Arizona, and other state-supported schools is a poor idea unless there are extenuating circumstances (e.g., minority or MD/PhD applicant). Medical school is expensive and most of the financial support for a student's year in a state-supported medical school comes from the tax-payers of that state. Essentially, the tax-payers of Washington, Utah, etc. will not subsidize the tax-payer of another state (in this case, Michigan). (It appears that numerous state-supported schools will gladly cash your \$20-100 application fee even though they have no intention of considering you since you're not an in-state resident. This is an easy way to lose some of your money. Be careful.) **Idaho residents** can apply to the University of Washington and University of Utah due to cooperative agreements (WWAMI for UW) where the Idaho tax-payer subsidizes Idaho residents at these institutions. **So, apply to the state-supported medical school associated with the state of your residency.** Also, consider applying to some out-of-state, state-supported schools that will consider you such as the University of Nevada, Oregon Health Sciences University, and the University of Colorado if you're an Idaho resident. Check out the admissions statistics in Medical School Admissions Requirements (MSAR); don't apply to state-supported medical programs in other states that don't enroll at least ~18% nonresidents. Finally, **apply to some private schools** (non-state-supported schools and hence more expensive), such as Northwestern University, Creighton University, etc., where 1) we've had some success in the past, 2) where someone you know is currently enrolled or has graduated (from medical school), 3) you have a good reason - such as a particular school is well-known for turning out primary care physicians and you have a strong leaning toward primary care, etc. Consider the military program at Uniformed Services (Uniformed Services University of the Health Sciences, F. Edward Hébert School of Medicine, Bethesda, MD). It is our strong recommendation that you apply to a few Osteopathic medical programs as well. D.O.s (Doctors of Osteopathic Medicine) are licensed in all 50 states and are licensed to prescribe medication, perform routine surgeries, deliver babies, have hospital privileges, etc. If you are serious about providing health care as a physician, you should look into D.O. programs. For a list of schools where UI students have been successful, see Appendix VIII. For additional details, consult the Allied Health Advisor.

To **how many** medical schools do I apply? Answer: how much money do you have? Money is a serious consideration since it is expensive to apply to medical schools and expensive to attend medical school interviews (on their campus) which are mandatory for acceptance. A rule of thumb is that you apply to about 8 to 18 schools – the national average is about 12. Perhaps better: apply to as many as you can (within reason) because the application process does involve some luck. (If you only apply to one or two schools the interpretation is that you are not truly serious about medical school and/or naive; if you apply to more than about 25, the interpretation is that you are desperate and not realistic.)

You may apply to a *single* medical school through the **Early Decision Program**. To apply through this program, you must follow the following guidelines: 1) Apply to only one participating U.S. medical school by the stated deadline (1 Aug. for AMCAS schools). 2) Provide the school with all required supplemental information by the stated deadline date (1 Sept. for AMCAS schools). 3) *Attend only this school if offered a place under the Early Decision Program*. If these guidelines are met, you will be notified of the school's admission decision by 1 October. If you are not accepted under this program, you will automatically be placed in the regular applicant pool by the school and may then apply to additional schools. Although both the University of Utah School of Medicine and University of Washington School of Medicine have EDP, Idaho residents may not apply to these medical schools through EDP. If you are interested in applying to other medical schools through EDP, consult AAMC's *Medical School Admission Requirements* for specific requirements. (A copy of this book is available in Life Sciences 237.) Generally, we feel that it is far preferable to apply to multiple programs early in the process (that is, in June and July) than to commit your self to a single EDP medical program.

What about **MD/PhD** programs? Currently, a combined MD/PhD program is offered through the federally-funded Medical Scientist Training Program (MSTP) at 33 U.S. medical schools as well as through almost all MD-granting (and several DO-granting) medical schools. These are attractive for several reasons: the school pays your tuition and gives you a stipend in addition and there are generally no state residency requirements. On the other hand, they are VERY competitive (higher MCAT scores and GPAs than for M.D. program), relatively few positions are available (e.g., 8-12 students admitted per year to the University of Washington MD/PhD program), and they generally require extensive prior research experience. (Very few MD/PhD programs require that you take the GRE in addition to the MCAT.) The typical format of these programs is 2 yrs medical school (& taking USMLE 1), 3+ yrs of graduate school (ending with the PhD), and then the last 2 yrs of medical school. The most popular residency choices for MD/PhD graduates are internal medicine, pediatrics, and pathology ([www.sciencebasedmedicine.org](http://www.sciencebasedmedicine.org)). MD/PhD programs are designed to produce academic, research-oriented physicians; they are not designed to provide students with an inexpensive way to become just medical practitioners. Using your combined degree often means residing in a relatively large city and your professional income is likely to be relatively low. Keep in mind that an MD or DO degree by itself provides a wide range of career options including research and medical administration. If you are interested in pursuing the MD/PhD option, be very aware of what research is being conducted where. Do some Medline computer searches and find out who is doing work you're really interested in at the institutions to which you are applying. Read their works, then contact them and discuss your research interests with them. They can be strong advocates on your behalf. Do this prior to formally applying for admission to the program.

Do I have access to the **Canadian** programs? The Canadian health care system is publicly financed, and the cost of tuition is subsidized by the government. Therefore, there is a very strong preference among the 16 programs for Canadian citizens or permanent residents. With the exception of McGill University (Montreal, Quebec), Canadian schools admit only a very small number of U.S. applicants. For more information on the Canadian schools, consult *Medical School Admission Requirements* (copy in Life Sciences 237).

8. **Await secondary/supplementary applications** from the individual medical schools you

listed in the AMCAS/AACOMAS application. You may get them back in a few weeks or in a few months. If you haven't gotten them after about 2 months, call or e-mail the medical school.

**9. Fill out secondaries with CARE (NO spelling or grammatical errors) and return them as quickly as possible.** Again: make sure all aspects of the forms are carefully prepared. (If you are asked to provide a photograph: sport coat/suit and tie for men, similar professional clothing for women. No T-shirts, tank tops, vacation pictures, or glamour shots. Consider a passport-type photograph from photographic services on this campus.)

Amazement has recently been expressed by the director of admissions at a prominent medical school about the quality of writing in the AMCAS personal comments section and the LACK of quality writing in the secondary's essays. Make sure these essays are well-written (<http://www.accepted.com/medical/secondaryessay.aspx>). Do not be in too much of a rush to get the secondaries out if that compromises their quality. Remember that a desire to see that things are done correctly and the ability to pay attention to details are important qualities in a physician.

UI materials (such as letters of recommendation) will be sent out soon thereafter. My suggestion is to use the extra space to spell out important things/events/accomplishments that you may not have had room for in the space allocated to the AMCAS essay. But, I suggest that you not fill it to just fill it.

Keep a copy of the relevant portions of the secondaries for your records. Review these just prior to going on your interviews.

**10. Residency certification:** If you are an **Idaho resident** and are applying for admission to the **University of Washington School of Medicine** and/or the **University of Utah School of Medicine**, you must get residency certification. If you are applying to both programs, you must be certified twice.

If you are applying to the University of Washington (whether or not you're applying to UUSoM), contact the UI Admissions Office for the necessary forms and assistance. Deadline for submission of these materials to the UWSoM is 15 January but do not wait that long to get the completed materials submitted.

If you are applying to the University of Utah (whether or not you're applying to UWSoM), you must submit documentation and completed application forms to Admissions, Idaho State University, Pocatello, ID, 83209 prior to 15 October to be considered for admission to the UU School of Medicine. Contact ISU Admissions for the UUSoM residency certification forms and instructions.

**11. Submitting letters of recommendation:** In addition to the letters specified by the various schools you're applying to (3 science faculty letters or 2 science and 1 non-science faculty letters), consider having 1-3 additional letters sent that provide special insights; letters by supervisors, employers etc. With the exception of two specific DO programs, we have not heard of any medical schools that will not allow you to submit additional letters. Adding such letters can be very valuable.

When applying to MD programs, submit your letter writer's name and e-mail address through AMCAS. Then, AMCAS will send your reference an e-mail message that contains both

the letter writer's assigned ID and your AMCAS ID numbers. The writer will upload the letter directly to AMCAS as a PDF file and AMCAS will distribute the letter to the MD medical schools to which you are applying.

When applying to DO programs, since AACOMAS does not have a similar service for collecting and distributing letters, you will need to create a reference placement file through the Career Center (UI Commons 334). The Career Center will then send confidential copies of your reference letters to the schools that you designate.

To establish a reference placement file, go to the Career Center website ([www.uidaho.edu/careercenter](http://www.uidaho.edu/careercenter)) and click on "students/alumni," then click on "placement files," then click on "Establish/Re-Establish" and complete the **Placement File Data Form** and a **Confidential Access Agreement Form**. Submit the forms to the Career Center by personal delivery, mail, fax, or scan/e-mail to ([careercenter@uidaho.edu](mailto:careercenter@uidaho.edu)). The agreement form and any file processing requests MUST be signed, dated, and have your name printed on them.

Remind your references to print your recommendation letters on letterhead and to sign the letter, as the Career Center cannot accept a letter that is not signed or does not have proper contact information on it. To insure confidentiality, ask your references to send the letters **directly to the Career Center (P.O. Box 442534, Moscow, ID 83844-2534) or you may hand deliver it in a sealed envelope with the letter writer's signature across the seal.**

To submit a reference letter from the Career Center for a DO school application, complete a **File Processing Request Form** under "Mailing" on their website. Be sure to include a complete mailing address for the reference letters and your printed name, signature and date. Submit the the File Processing Request Form to the Career Center by mail, fax, in person or by scan/e-mail to the [careercenter@uidaho.edu](mailto:careercenter@uidaho.edu).

You receive 5 FREE file processing requests within one calendar year of establishing your file. After that, the fees are as follows:

- Regular first-class mail (within 3 business days) \$5.00
- E-mail (within 3 business days) \$5.00
- Fax (within 3 business days) \$5.00
- Rush service (within 1 business day) \$5.00 additional fee per individual request/address (NOT included in the 5 free file processing requests).

The Career Center will keep your placement file for ten years from date of last use; after that, it will be destroyed. They do not keep resumes, cover letters, or transcripts in your placement file. For an academic transcript, you will need to contact the Registrar's office at 885-6731.

**12. Mock Interviews: The Allied Health Advisor will help you schedule a practice interview.** This will occur only after we have on file:

- a) your MCAT scores,
- b) an unofficial copy of your transcripts
- c) list of schools to which you are applying
- d) your AMCAS personal statement.

Your responsibility will be to confer with the Allied Health Advisor about the mock interview process and then invite 1-2 additional faculty members, schedule a suitable time and room location, and arrange for videotaping. A video-camera can be check out from the ITS

Media Center, UI Commons room 131.

This interview will give you practice “under pressure” and questions will likely touch upon: why you want to become a physician, ethical issues, current issues in medicine, current issues outside of medicine, general knowledge questions (e.g., who is the governor of the state), questions about you (e.g., what do you do for fun, have you read any books lately) and, of course, miscellaneous topics.

**13. Financial Aid Application:** Get a copy of the Free Application for Federal Student Aid (FAFSA) from the financial aid office of any of the programs you’re applying to. Fill it out completely, sign and mail it to the processor in the envelope provided as soon after 1 January as possible. For priority consideration, your FAFSA must be mailed by about 15 February. (The exact date varies a little from year-to-year.) These forms will be the basis for your getting sufficient money in loans to pay for medical school. Unfortunately, admission to medical school and obtaining financial aid are independent processes and the deadline for filling out these FAFSA forms is usually before you’ve heard that you’ve been accepted. Although it may be frustrating to devote energy to filling out the FAFSA forms before you know you’ve gotten into a program, it is important that you fill them out promptly. Don’t procrastinate in mailing them back and keep copies for yourself. Apply for financial aid even if you think you won’t need any outside financial help - things can change (e.g., divorce, spouse loses job, relatives can’t come up with all the money they expected to give you, etc.). You can access FAFSA on the web at: <http://www.fafsa.ed.gov/>

Make sure you keep your address updated. You may miss very important financial deadlines by the mail not getting to you quickly after you’ve moved (once again).

Some medical schools require a complete credit report. Students should obtain and check their credit reports well BEFORE any medical school require them to make sure they are accurate. This is especially true for students with common last names. Several companies will provide you with a complete credit report for a small fee. (The University of Washington recommends a credit check through Equifax [800-685-1111], Experian [888-397-3742], or Trans Union Corporation, Consumer Disclosure Center [800-916-8800 or 800-682-7654].)

Several companies will do a medical school scholarship search for you for a fee. The word we have gotten from the financial aid office at the University of Washington is that these services are a rip-off and that you can get the same information for free off the web. Check out <http://www.fastweb.com/>

By the way, when you go for an interview, it’s important to have some reasonable idea of how you’ll pay for medical education. For more info, check out AAMC’s FIRST (Financial Information, Resources, Services, and Tools) site: [https://www.aamc.org/services/first/first\\_for\\_students/](https://www.aamc.org/services/first/first_for_students/)

**14. What determines if you get an interview?** The initial screen of your application at the medical school is conducted by computer based on numbers: grades and MCAT scores. For example, at the University of Washington School of Medicine (in 2009), the preliminary screen is based on the following: weighted GPA = [(Freshman GPA X 1) + (Sophomore GPA X 2) + (Junior GPA X 3)]/6 and MCAT average = [Verbal Reasoning Score + Physical Sciences Score + Biological Sciences Score]/3. Your Combined Score (CS) is calculated as

CS = weighted GPA + MCAT average/3.75

If CS is below 5.0, your file is rejected and you're mailed a rejection letter. If above 5.0, your file is subsequently screened by real people! Several things are worth pointing out. For this initial screen, freshman grades count and senior and grad grades are NOT involved. Also, the screen is impersonal – the computer doesn't care that you didn't make the cutoff because of a part-time job, athletics, marching band, sick family member, etc. One student tried to convince the pre-med advisor that her GPA of 3.25 would have been much higher had she not carried a demanding part-time job. While the pre-med advisor may be sympathetic, it is highly unlikely that the admission committee's computer will be. Protect your grades! Once you've made the initial cut, a panel of people will evaluate all of your academics and scholarly work, your medical experience and exposure to doctor/patient interactions, your motivation and personal statement, service and leadership, whether you express any interest in rural medicine, whether you have plans to practice in the region, whether you're educationally and/or economically disadvantaged, and whether you have significant experience with an underserved population. Glowing letters of recommendation can be helpful at this point. If you get enough votes, you get an interview. If not, you're likely to get a 'Not Ready Yet' letter with feedback suggesting that you get more life experiences, more clinical exposure, more understanding of the medical field, retake the MCAT and/or take current science courses.

15. **Wait** for letter inviting you for an interview. (Only on rare occasions will a school call you to arrange an interview. Nonetheless, have a fairly conservative message on your answering machine.). If something important happens while you are waiting, such as getting straight A's or having a scientific paper published (or accepted for publication), do send a letter to the various programs and inform them.

16. Applicant and Allied Health Advisor will review the video of the mock interview prior to the applicant's leaving for formal medical school interviews. It is often constructive to see yourself as others do. Reviewing the video may reveal mannerisms (e.g., eye contact, smile, etc.) and answering styles (e.g., rambling) that could stand modification and improvement.

17. **Got an interview? GO!** (See Appendix IX & X for more comments and information on interviews.)

If you apply early, schools will probably give you some flexibility in scheduling your interview. If that is the case, you're probably best off by taking the interview as early as possible. It is possible, and it has happened to some of our students, that by the time you interview, all seats have already been offered. In that case, you are competing with the other interviewees for seats that *may* open as people withdraw acceptances. It is much better to interview early before all the seats have been offered.

Before you get to the interview, review the school's web page, figure out its mission and characteristics - be very familiar with the program at the time you walk into the interview. If you can locate people who are in or have graduated from that program, get their impressions, positive and negative, of the school and program. Be prepared to answer certain questions such as why you want to become a physician and "Do you have any questions for me?" For this latter question, make sure you have some solid - not trivial- questions in mind (such as: if you had a

son/daughter in my position, would you encourage them to go to this school and why, what research opportunities exist for your medical students, how much nutrition, preventative care, geriatrics, [or whatever you're interested in] emphasis is there in your curriculum, how much flexibility exists in your curriculum, what is the range of clinical facilities available to your medical students, does this school provide guidance to its students and to its alumni on debt management, how do students from this medical school perform on the National Board Examinations, is there a formal mechanism in place for students to evaluate their professors and attending physicians, etc.)

*Reread your personal statement before entering the interview. If you've emphasized certain activities in your AMCAS/AACOMAS personal statement and/or secondaries, be very sure you can answer questions about those activities in significant detail.* For example, if you indicate that you've been working on a research project with Professor X, be prepared to answer questions about the hypothesis of the research, preliminary data and their interpretation, and techniques used in your project. Also, if you've been awarded the John Doe Memorial Scholarship, you'd better know who John Doe was and what he accomplished. Be aware of current events within and outside of medicine. To that end, make sure you've been watching the national news and make it a habit to read a highly regarded newspaper such as the Wall Street Journal and/or the New York Times. Go into the interview having read an interesting book. Show you're a well-rounded individual.

What do you wear? Do you make a fashion statement? To what extent do you use clothing to show your individuality? Keep in mind that the members of the medical profession tend to be fairly conservative. Perhaps the best advice is to "dress like the people who do the job that you're interviewing for." Therefore, since you're interviewing to become a physician, dress like an upper middle class professional. In terms of individuality, that should be taken care of by your unique combination of activities, interests, and accomplishments rather than by your appearance. Here are some comments made recently by a member of the admissions committee at an east coast medical school: "We consider the Interview to be perhaps the most important day in a student's career. Therefore, they should dress up and look good. It is a sign of respect for the importance of the day and for the committee that has assembled to greet them. Our committee also dresses appropriately to show respect to the candidates. While we have yet to encounter piercings, we have had an occasional candidate without a tie, or in an old sweater, and one wearing a sweatshirt with the Penn logo on it. Needless to say, we have enough candidates to "pass" on those and go for the student who will eventually present a very professional appearance to our patients. Please, remind students that freedom to dress and act as they wish is alive and well, however, there is always a price to pay for it."

**Go into the interview with confidence:** they wouldn't be wasting their time on you if they didn't feel that you are a very viable, promising candidate who can handle the academic rigors of medical school.

*Do not give the answers you think they want to hear!* Make sure your answers reflect how you really feel and are consistent with the way you live your life. The interviewers must get the feeling that they've gotten a glimpse of the real you rather than some facade of your impression of the 'ideal' candidate.

Although we have been informed that it will have no influence on your application, whatsoever, it is probably a nice idea to send thank you notes after an interview, especially if the interview was enjoyable and enlightening. (Keep them simple and conservative.) This is generally not seen as "kissing up" and suggests that you are thorough, thoughtful and interested

in their program.

**18. When you return from the formal interviews, please describe the interviews to us and let us know about the format and what they asked you - we want your help in preparing those pre-meds which come after you.**

**19. Sit and wait for results.** The results usually come back in the form of a letter indicating: acceptance, rejection, or, most likely, that you are in some intermediate/competitive group and they will get back to you later - sometimes much later, so you sit and wait some more. Rarely will an acceptance be communicated by phone although it has happened recently.

Is there something that you can do to enhance your chances at this time: probably not. HOWEVER, if something has recently happened which is *very* positive, a new award, achievement, or accomplishment, it can't hurt to let them know in a letter. Then use that letter to remind them of your unique strengths as outlined in your AMCAS statement, secondary application and/or interview. Also, thank them for continuing to consider your application. Such a letter does reemphasize that you really want the acceptance to their program. If you do send a letter, be careful that its core, the main reason for writing the letter, is truly important information and not something that THEY would consider trivial.

**20. You're accepted at several medical programs: what now?** One important consideration is expense. High debt loads can affect what you do and where you go after finishing your residency. A low debt load allows you more freedom in choosing your specialty and where you practice. (For example, you have the urge to provide medical care in a third world country or you want to start up a practice in a rural community in this country. Providing such service, however, could be financially impossible if you have a high debt load with high interest because you've gone to a prestigious, expensive, private program.) One distinction to keep in mind is that some programs are very strong in preparation for primary care while others focus on non-primary care specialties. If you are reasonably sure that you want to go into primary care, that's an important consideration to take into account. In terms of getting into the most competitive residency programs after completing your four years of medical school, the name of the medical school you attend can make a difference. On the other hand, if you want to go into a residency program that is not that competitive, essentially any US medical school will do. Therefore, choice of a medical school depends, in part, on the area in which you want to specialize. Since most students do not have that decision made when choosing a medical school, it is wise to go for the best school that you can get into and that you can afford.

As soon as possible after you receive an acceptance, protocol dictates that you withdraw your applications from other programs that rank **BELOW** the school that has accepted you on *Your* priority list of schools. This will open seats at those programs for your fellow applicants. (Obviously, do not withdraw your application from consideration at those programs that rank above the program that has just accepted you.) You should not hold more than one place at a time unless you are waiting to hear about financial aid. (By the way, medical schools do receive information about candidates' acceptances at other schools.)

21. **Rescinded acceptance:** You're accepted; it's a sure thing, right? Well, not quite. Every letter of acceptance is accompanied by caveats; it is not necessarily a binding acceptance. Letters usually state that the applicant must successfully complete the rest of any coursework they will be taking, must maintain a good citizenship record at their institutions, not have legal issues, etc.

22. **Final Thoughts on Applying:**

Don't be in too much of a hurry to apply - the average age of someone enrolling in medical school is currently about 25. There is a widely held belief that you are probably more mature and motivated if you're older; both are almost always positive. Rather than hurrying to get your application in at the last minute, consider waiting, improving your application even further and getting an early start next time around. Over the last 10 years, about 75% of our applicants have been accepted into medical programs. 93% of those successful applicants were accepted on their first application while the success of reapplicants was about 20%. Therefore, be patient, put together a great application, and apply early in the application cycle -- you do not want to be rushed into turning in a mediocre application.

If you're close to burn out in your final year, consider taking a year off. Depending upon what you do with that time, it won't hurt your chances of being accepted and, in fact, will probably improve them. If you do take time off, do something that broadens your horizons and teaches you something and/or gets you out of debt. Travel or work at a hospital or care facility or work in an industrial setting that teaches you something valuable such as language skills or computer use. Particularly impressive is Peace Corps or Vista experience.

What about deferring matriculation: can I apply, be accepted, then defer my starting date for a year or two? Except in rare circumstances, the answer is NO. If you want time off, take it before applying (but not necessarily before taking the MCAT).

Once you do decide to apply,

apply as early as possible,

**APPLY AS EARLY AS POSSIBLE,**

**APPLY AS EARLY AS POSSIBLE,**

in the application cycle preferably in June or July one year prior to your target date for enrolling in medical school.

Appendix XI (still under construction) contains general "pearls of wisdom" solicited from recent and successful applicants. Give these pearls some serious consideration. Keep in mind that these people have gotten to where you probably want to be.

**What if I didn't get in?**

1. **Reapplication:** If you've got the stamina, money and motivation, by all means, try again! And apply in a timely fashion. However, be realistic about your chances. Simply reapplying with similar credentials is rarely successful. **You need to become a different applicant from**

**the one who previously applied.** This may involve significantly improving your MCAT scores, GPA, gaining additional hands-on experience, improving your interview skills, writing a much better essay, getting better/different letters of recommendation, reapplying earlier, or some or all of the above. They will ask: how is this application different from the previous application? For the greatest chance for success, *all* aspects of the application will have to be significantly different and better from the previous attempt.

How do I know what to improve? If you haven't already, check out the self-assessment document on the University of Utah School of Medicine site: <http://medicine.utah.edu/admissions/criteria/Self%20Assessment%202009-2010.pdf> Chances are, you already know what needs to be improved. Nonetheless, write, phone or visit those programs in the summer after all the rejections are final. Ask representatives of those programs to look over your file and let you know what would make you a more attractive and competitive applicant next time. Unfortunately, sometimes you do not receive constructive feedback. Sometimes those medical school representatives are so busy with their other functions that they have little time and energy for you. Sometimes they'll tell you to go back to your own pre-med advisor since he/she 'knows you so much better than we do.' Sometimes they're reluctant to give you absolutes and specifics because that can come back to haunt them (e.g., 'Since I did EXACTLY what you told me to do, why didn't you accept me this time?'). But if you don't try to gain insights, you're not going to get any. Contacting programs in this way can be emotionally painful. They've already rejected you and opening those wounds to find out why is not easy - but it can be very constructive. Then use whatever information you can get and work on yourself. And if you do get specific advice from an admissions official (and it is likely that that official will keep notes of the exchange), make very sure you follow that advice explicitly. (Mailing that person a note thanking him/her for their time, honest appraisal, and constructive suggestions couldn't hurt.) Following that person's advice is helpful and important; not doing so can be fatal to your reapplication chances at that institution.

*Don't be in too much of a hurry to reapply.* Often it's best to take an additional year or two and make sure that you're a MUCH improved applicant. Make sure you get additional hands-on experience and do interesting things (volunteer for some organization, e.g. Habitat for Humanity, Peace Corps, VISTA, etc., with which you haven't previously worked) in addition to working on your grades and/or MCATs and/or medical experiences.

*Don't use the same AMCAS personal statement you used last time.* It didn't work last time, it probably won't work this time. Again, you've become a much-improved applicant so you've got new experiences, new insights, and new arguments to write about. Make sure to highlight the specific steps you've taken in the intervening time to make yourself a stronger applicant. So, carefully craft a new, much improved personal statement. Also, spend less time on how your original interest in the field developed. Instead, focus on showing how you have gained a greater in-depth and refined understanding of the profession and how you wish to be part of it. It can be a good idea to extrapolate into the future and discuss long-term goals. Focus on what you have to offer the program that will enhance the experience of your classmates, as opposed to what you hope to get from the program.

Submit at least one new letter of recommendation – even if it's from one of the same people who wrote a previous letter – just make sure it's a distinctly new letter and highlights the specific steps you've taken to improve in the intervening time.

2. If you were genuinely close to success, you might consider picking up a **minor** after finishing the BS while boosting your entire application. A student may complete an undergraduate minor even though he or she has already earned a baccalaureate degree. (If the sole objective is to complete an undergraduate minor, the student normally registers as a major in the department offering the minor.) Remember, however, to work on your entire application including additional hands-on experience rather than narrowly focusing on just one part of the application.

3. If you didn't consider **Osteopathic Medicine** the first go around, consider it now!!! Find a local D.O. and talk to him/her - you'll probably be very pleasantly surprised. Keep in mind that D.O.s can take (if they want) a residency in an M.D.-granting institution, can prescribe medication, perform surgery, deliver babies, and can have hospital privileges. Also, medical scholarships from the military make no distinction between M.D. and D.O. programs. *If you are truly interested in pursuing a medical career to help people, you certainly should consider osteopathic programs.* D.O.s are licensed to practice medicine in all 50 states. See Osteopathic Medical Student Profiles. In their Own Words: A Snapshot of the Osteopathic Medical Student: [www.aacom.org/InfoFor/applicants/profiles/Pages/default.aspx](http://www.aacom.org/InfoFor/applicants/profiles/Pages/default.aspx) There is some concern about whether D.O.s can practice internationally. American Association of Colleges of Osteopathic Medicine has a listing of countries that take the D.O. degree (see: [www.aacom.org/](http://www.aacom.org/)). Also, you can avoid this "limitation" by sitting for the USMLE as well as the D.O. boards. For additional information, see the Osteopathic International Alliance: [www.oialliance.org/](http://www.oialliance.org/)

4. Pursuing a **Graduate Degree**: Some students feel that getting a master's degree (or a Ph.D.) will help their subsequent chances of admission. Certainly this can be positive. It represents a commitment to a formal program and acquisition of additional knowledge. Publishing the results of your work is important since it represents your unique intellectual contribution to knowledge in the field. (The graduate degree and field do NOT have to be medically-oriented.) However, be aware that grades in graduate school generally don't count as much as your undergraduate grades ('everyone Knows there's grade inflation in grad school', 'the course load in grad school is so light that success in getting good grades doesn't mean much', 'of course you'll get good grades in grad school because the grad student's advisor doesn't want to lose a cheap pair of hands', 'you'll get good grades because you pick only interesting courses to take', 'most of your grad grades represent research and seminar credits rather than didactic hard sciences classes,' etc.). Also be aware that spending much time filling out AMCAS and secondaries, researching medical programs, and going to interviews may seriously annoy your major professor who would probably prefer you spend your time on generating and analyzing data and writing manuscripts and/or a dissertation. Completing a graduate degree is certainly no guarantee for acceptance to medical school -- no matter how well you do. Nonetheless, it does demonstrate that you are advancing yourself professionally.

5. What about **Foreign Medical Schools**? The American Medical Association urges all students to apply or reapply in the United States or to consider other alternatives before applying to foreign medical schools. There is no organizational body in the United States that accredits or evaluates foreign medical programs; the World Health Organization does not accredit or evaluate such programs. There are additional significant concerns associated with these off-shore

programs. For example, language of instruction is not necessarily English, prospects of receiving financial aid are uncertain, ability to transfer into a U.S. program after 2 years is low, success on U.S. national board exams is often relatively low, some state governments have restricted third and fourth year clerkships to foreign medical students, these students may have difficulty in obtaining a license in some states, and matching for residency may be low -- especially if you're not going into primary care. (Primary care residencies are often available but these may be undesirable for reasons such as location. Be careful about off-shore programs boasting high residency matches - there is significant AMA-sponsored legal activity to reduce residencies available to foreign graduates.) Most hospital chief executive officers see foreign medical graduates on the medical staff as a disadvantage. It is now widely believed that with health care reform there will not be a shortage of physicians in the near future. If so, foreign medical graduates are likely to face stiffer challenges to acceptance in this country. If you currently are volunteering at a hospital or clinic, ask the people who do the hiring about their feelings toward off-shore-trained physicians. Therefore, if you decide to pursue this option, **BE VERY CAREFUL AND APPROACH IT WITH YOUR EYES WIDE OPEN.** At the minimum ask the foreign program you're considering some tough questions: 1) What is your USMLE Step I and Step II pass rate? (The U.S. Medical Licensing Exam Step I is taken at the end of the first two years of medical school; USMLE Step II is taken at the end of the clinical years. First time pass rates by Caribbean medical students on USMLE I currently range between 85% to less than 20% depending on specific school.) 2) What is your clinical placement rate at affiliated hospitals in the US? (Clinical rotations [=placement] are conducted in affiliated hospitals during the third and fourth years of medical school.) 3) What percentage of your graduates receive a residency in the US? Where? 4) How long has the school been in existence? 5) What are the mean science and overall GPAs of your accepted students? 6) How do students fund their education? 7) What percentage of entering medical students graduate with their medical degree? 8) What are the academic credentials of the faculty teaching the basic science courses? Where were they educated? In addition, check out the following two references:

Van Zanten M, Boulet JR. Medical education in the Caribbean: variability in medical school programs and performance of students. *Academic Medicine* 2008; 83: s33-s36

Van Zanten M et al. Accreditation of undergraduate medical education in the Caribbean: report on the Caribbean accreditation authority for education in medicine and other health professions. *Academic Medicine* 2009; 84: 771-775.

**6. Consider Alternative Careers** such as dentistry, medical technology, nursing, pharmacy, physician assisting, podiatry, public health, optometry, toxicology, etc. (For more information on nursing, contact Dr. Joseph Cloud, Department of Biological Sciences. Contact the Allied Health Advisor for information on the other career options.)

Such alternatives can provide you with an emotionally and financially rewarding and respected career. Furthermore, such careers may allow you more time and freedom to enjoy your present or future family than a career as an M.D. or D.O physician.

Physical therapy may be an option. However, it is currently almost as competitive as medical school and you would need extensive, documented experience with PT's.

A very good source of information on alternative careers is the book, *Allied Health Educational Directory*, which includes descriptions of many health oriented careers from Anesthesiologist's Assistant to Surgical Technologist. (Appendix XII is a list of careers covered

in this book.) It is published annually by the American Medical Association (ISBN: 0-89970-601-0). Look at a copy of this book in Life Sciences, room 237. (We also have *Education of the Osteopathic Physician & The Difference a D.O. Makes*, *Admissions Requirements of United States and Canadian Dental Schools*, *Pharmacy School Admission Requirements* and *Resource Guide to Career in Toxicology* in room 237.)

Finally, [www.explorehealthcareers.org](http://www.explorehealthcareers.org) is a relatively new web site with a lot of current information; check it out.

**Appendix I:** Majors of successful/unsuccessful applicants to medical school, 1990-2010.  
 (Biology includes zoology.)

Agricultural Education	0/1	
Agricultural & Veterinary Science	2/2	
American Studies/International Relations	0/2	
Architecture	0/1	
Biochemistry	6/2	
Biology	63/21	
Business/Finance	3/0	
Chemistry	11/5	
Engineering, Biological & Agricultural	3/0	
Engineering, Chemical	4/1	
“ Computer	0/1	
“ Electrical	1/0	
“ Geological	1/0	
“ Mechanical	1/1	
English/English Literature	3/0	
Foreign Language	0/1	
Geography	0/1	
History	0/1	
Horticulture	1/0	
Interdisciplinary Studies	1/0	
Mathematics	1/1	
Microbiology/Molec Biology	35/13	
Music	0/1	
Non-Matric (Non degree seeking)	6/1	
NROTC	1/0	
Nutrition (& Health Ed [1])	8/2	
Physics		1/1
Political Science	2/0	
Psychology	13/2	
Sociology	2/0	
Sports Science/Athletic Training	11/1	
Double majors:		
Biology & Foreign Language	0/1	
Business & Mathematics	1/0	
Chemical Engineering & Foreign Language	0/1	
Chemistry & Molec Biology	1/0	

## Appendix II:

### MCAT: when to take?

The MCAT (Medical College Admission Test) must be taken at least one year before you hope to enroll in medical school; ideally, you should take it earlier. Enrollment in medical school always occurs in Fall and consequently, you must have taken the MCAT the previous Fall or earlier.

Advantages of taking the MCAT in Fall (1 yr before you hope to enroll in medical school):

1. You didn't do as well as you wanted on a previous try. (eg. health, personal problems, etc.)
2. You needed the summer to study. (Chances are, however, that like most students you didn't put in as much time during the summer as you had intended. A better plan of attack is to start serious study/review for the MCAT at the beginning of your junior year.)

Disadvantages of taking the MCAT for the first time in Fall:

See 'Advantages of taking the MCAT in Spring'

Advantages of taking the MCAT in Spring (1.5 yr before you hope to enroll in med school) or earlier:

1. You will receive your MCAT scores early. AMCAS (American Medical College Application Service) processes your application materials no sooner than 1 June; similarly with AACOMAS. If you are happy with your MCAT scores, you can begin the application process at about this time. (Medical schools may turn down your application prior to getting MCAT scores on the basis of grades and AMCAS statement, however, **THEY WILL NOT PROCEED BEYOND THIS INITIAL SCREENING WITHOUT YOUR MCAT SCORES.**)

Advantages of applying early:

- a. Early, complete applications receive much attention as relatively few people apply during the summer. (Fall MCAT scores reach the med schools in early/mid-November and admissions committees become inundated with completed files. Consequently, they cannot give the same consideration to these files as those completed in summer.)
- b. Since medical schools send out supplementary admission packets for you to fill out after they receive the completed AMCAS application, early submission of AMCAS applications will give you plenty of time to carefully fill out the med school supplementary applications. (In contrast, if you file the AMCAS application late [near the deadline] you will be flooded with supplemental applications near the end of Fall semester -- when

university papers are due and many exams are given.)

c. The earlier you submit completed applications, the greater the chance of errors on forms being caught and corrected without compromising your application.

d. The earlier you submit completed applications, *the greater the chances of your being seen as organized, enthusiastic, motivated and confident in your decision to pursue medical studies.*

e. The earlier you submit completed applications, the greater the chances for early interviews.

f. The earlier you are invited to an interview, the greater the chances that the interview date and time are flexible. This could be particularly important if you have interviews at multiple east coast medical schools since (for financial reasons) you probably do not want to make any more trips to the east than necessary. (Several years ago, one of our [successful] pre-meds made 2 trips to the Philadelphia area within 2 weeks since neither medical school to which he was invited for an interview would budge on their interview date. Going to interviews can be the Most expensive part of the entire application process.)

g. The earlier your interviews, the greater the chances of early acceptance.

h. The earlier you are accepted, the greater the chances of getting good loan packages and therefore, in the long run, saving money. (Loan packages are given out on a first come - first serve basis to accepted applicants and some packages are significantly better than others.)

2. Psychologically, it may help you to know that you have a second chance later if things do not go well. If you wait until Fall to take the MCAT for the first time, you will have the pressure of knowing that if things do not go well, you will lose an entire year.
3. For reasons not clear but perhaps related to the above point, national MCAT scores from Spring exams are always higher than scores from the Fall exams.
4. By taking the MCAT at the end or just after Spring semester, the material you have learned in courses will be as fresh as possible in your mind. (By postponing the MCAT until Fall, you may (or will probably) forget much of the content of these courses.)
5. The University of Idaho will not schedule mock med school interviews until we have: a copy of your (unofficial) transcripts and your MCAT scores.

Overall recommendation:

## **Take the MCAT near the end or just after spring semester!**

Check out the MCAT study guides on Reserve in the UI library. Buy one of your own (for example, through Amazon.com, Barnes & Noble, etc.) and go through it as you're going through the science prerequisite courses. Study for your classes with the idea that you are also studying for the MCAT. Within about 6 months of taking the exam, take multiple practice MCAT exams with a clock to get your pacing down. Then, take the exam about 15 months before you hope to start medical school.

**Appendix III.** Ok, so what's available at the **Reserve Desk** at the University of Idaho Library under MCAT?

Two copies each of the following study guides:

- 1) Kaplan MCAT premier program, 2007-2008 edition
- 2) Princeton Review MCAT Workout (c. 2008)
- 3) Examcrackers 101 Passages in MCAT Verbal Reasoning
- 4) Examcrackers MCAT Complete study package (7<sup>th</sup> ed)

One copy each of the following 2009-2010 Kaplan study guides

- 1) Advanced
- 2) Biology
- 3) Verbal Reasoning & Writing
- 4) General Chemistry
- 5) Organic Chemistry

Are there additional study guides that you've heard about that might be valuable additions to our Reserve Desk holdings? Let us know.

## Appendix IV: SUMMARY OF UI MCAT RESULTS (1996-2009)

### MCAT Scores of Successful UI Applicants

Noncomprehensive list of MCAT scores of successful UI applicants to MD and DO programs since 1996 (that is, since the last major change in the MCAT):

MCAT Sections: VR = verbal reasoning; PS = physical sciences; WS = writing sample; BS = biological sciences.

Scores on the multiple-choice sections range from 1 (low) to 15 (high) with the average level of performance for all examinees is 8.0. Scores on the Writing Sample section are reported on an alphabetic scale ranging from J (low) to T (high). (The letter score represents an individual's combined scores from all readers [at least 2] on both Writing Sample topics.)

Type of Program (Pgm) = MD, MD/PhD, or DO

VR	PS	WS	BS	Type Pgm:	School Enrolled in:
1996 Application (Fall 1997 enrollment)					
6	8	K	8	DO	Lake Erie Osteopathic
9	11	T	11	MD	Harvard
10	9	P	12	MD	WAMI
8	8	M	9	DO	Chicago Osteopathic
8	8	Q	10	DO	Touro Osteopathic
12	13	O	11	DO	Kirksville Osteopathic
1997 Application					
10	9	P	10	DO	Chicago Osteopathic
6	9	R	10	DO	Chicago Osteopathic
9	9	M	10	MD	Creighton
11	8	M	10	MD	Creighton
12	10	Q	10	MD	WWAMI
13-15	10	P	11	MD	WWAMI
10	9	R	11	MD	WWAMI
11	13	R	12	MD	WWAMI
11	8	O	10	MD	Uniformed Services

1998 Application

9	9	O	10	MD	Loma Linda
9	11	P	11	MD	WWAMI
9	9	P	10	MD	WWAMI
9	13	O	11	MD	WWAMI
8	8	M	8	MD	WWAMI
11	10	P	9	MD	Einstein
7	8	M	8	DO	Des Moines Osteopathic
10	12	Q	12	MD	Nevada

1999 Application

10	9	N	10	MD	Tulane
10	10	Q	10	MD	Utah
9	8	N	11	MD	Utah
10	7	P	11	MD	WWAMI
11	11	P	11	MD	WWAMI
8	12	P	11	MD	WWAMI
8	10	Q	11	MD	WWAMI
9	9	R	10	MD	WWAMI
6	11	M	10	MD	WWAMI
8	7	Q	9	DO	Western States Osteopathic
9	9	P	10	DO	Des Moines Osteopathic
11	8	O	8	MD	Uniformed Services

2000 Application

10	9	Q	10	MD	Rochester
11	7	O	8	MD	Hawaii
9	7	N	7	DO	Western States Osteopathic
9	7	M	9	DO	Western States Osteopathic
9	7	Q	8	DO	Western States Osteopathic
9	12	N	11	MD	Dartmouth

2001 Application

8	9	O	8	DO	Arizona Osteopathic
5	8	Q	8	DO	Kirksville Osteopathic
9	7	K	8	DO	Kirksville Osteopathic
9	9	Q	9	DO	Kirksville Osteopathic
9	8	M	9	DO	Kirksville Osteopathic

2002 Application

6	8	P	6	DO	Arizona Osteopathic
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11	10	R	10	MD	Georgetown
10	7	N	8	DO	Lake Erie Osteopathic
12	7	T	10	MD	Oregon
8	10	L	8	MD	Uniformed Services
10	8	O	10	DO	Kansas City Osteopathic
10	8	P	7	MD	WWAMI
10	10	S	9	MD	WWAMI
7	9	O	9	MD	WWAMI
13-15	10	S	11	MD	WWAMI

#### 2003 Application

13	9	O	9	MD	Loma Linda
7	9	P	10	MD	Utah
11	12	Q	14	MD	WWAMI
12	9	N	12	MD	WWAMI
9	8	N	9	DO	Midwestern Chicago Osteopathic

#### 2004 Application

10	10	Q	9	MD	Utah
7	9	O	9	DO	Western States Osteopathic
12	9	N	12	MD	WWAMI
8	8	Q	9	MD	WWAMI
11	6	N	7	DO	Touro NV Osteopathic
8	6	O	6	DO	Touro NV Osteopathic
5	7	P	7	MD	Utah
7	7	Q	8	DO	Arizona Osteopathic
10	7	Q	8	MD	Utah

#### 2005 Application

7	10	P	10	MD	WWAMI
10	10	R	8	MD	WWAMI
7	8	M	10	DO	Des Moines Osteopathic
8	9	N	9	DO	Des Moines Osteopathic
9	6	P	5	DO	AT Still, Kirksville Osteopathic
9	7	Q	8	DO	Touro NV Osteopathic
8	11	N	9	DO	Touro NV Osteopathic
10	9	M	11	MD	Univ Conn
11	6	M	8	DO	Kansas City Osteopathic

#### 2006 Application

11	10	M	9	MD	Tulane
10	10	Q	9	MD	NY Med Col

9	10	P	10	MD	WWAMI
8	10	Q	8	MD	WWAMI
12	12	Q	12	MD/PhD	Rochester
11	8	M	10	DO	West Virginia Osteopathic

#### 2007 Application

10	11	M	9	MD	Penn St.
9	7	M	9	DO	Des Moines Osteopathic
9	11	Q	11	MD	Creighton
11	7	N	10	MD	Utah
8	7	P	7	DO	Kansas City Osteopathic
11	7	O	10	DO	Lake Erie Osteopathic
12	10	N	10	MD	WWAMI
6	7	L	7	DO	Pacific NW Osteopathic
9	7	M	11	DO	AZ Midwestern Osteopathic
12	11	S	12	MD	WWAMI
9	10	M	9	MD	Chicago Med
9	8	S	10	MD	WWAMI
7	11	N	14	MD	Nevada

#### 2008 Application

7	10	M	8	DO	Western States Osteopathic
7	11	S	9	DO	Des Moines Osteopathic
9	7	Q	8	MD	Utah
8	7	Q	7	DO	Rocky Vista Osteopathic
10	8	O	9	DO	Rocky Vista Osteopathic
10	12	M	11	MD	North Dakota
12	9	R	11	MD	WWAMI
13	14	N	12	MD	Harvard

#### 2009 Application

11	11	Q	12	MD	Emory
10	11	O	10	MD	Nevada
11	10	M	12	MD	Iowa
9	8	R	9	MD	Utah
11	12	S	11	MD	Utah
11	9	O	9	MD	WWAMI
9	6	O	9	DO	Western States Osteopathic (CA)
10	12	P	10	MD	Kansas
10	9	Q	11	DO	Pacific Northwest Osteopathic, Yakima
7	11	S	11	MD	Uniformed Services
11	9	Q	10	DO	Western States Osteopathic (CA)
11	8	R	11	MD	WWAMI

## Appendix V: Summary of results of students who took the MCAT multiple times.

Change: numerical change in physical sciences (PS), verbal reasoning (VR), and biological sciences (BS) scores relative to previous MCAT scores (of same person) relative to their Biol/Chem/Phys/Math GPA as well as cumulative GPA. This is not a comprehensive list and is only meant to give an idea of success on subsequent MCAT attempts.

Data collected from 2007-10 examinees.							Difference
BCPM	Cumm	PS	VR	WS	BS	Total	from
GPA	GPA						Previous
3.73	3.77	12	8	M	12	32M	
	repeat	10	11	L	10	31L	-1
3.73	3.8	8	8	R	7	23R	
	repeat	9	10	Q	9	28Q	5
	repeat	8	9	R	9	26R	-2
3.21	3.58	7	11	M	9	27M	
	repeat	8	11	O	9	28O	1
3.37	3.61	6	8	M	8	22M	
	repeat	6	9	O	9	24O	2
3.11	3.54	6	9	S	8	23S	
	repeat	5	11	M	5	21M	-2
	repeat	6	7	R	8	21R	0
4	3.93	10	9	Q	9	28Q	
	repeat	12	10	P	10	32P	4
3.25	3.2	11	9	Q	10	30Q	
	repeat	11	7	S	11	29S	-1
3.55	3.62	6	5	M	8	19M	
	repeat	8	8	M	9	25M	6
	repeat	8	7	M	12	27M	2
x 3.59	3.61	12	12	M	10	34M	
	repeat	10	11	M	9	30M	-4
	repeat	11	11	L	11	33L	3
3.7	3.79	9	4	M	8	21M	
	repeat	9	10	O	10	29O	8
3.78	3.84	7	10	Q	9	26Q	
	repeat	10	10	R	10	30R	4
3.51	3.69	7	9	Q	9	25Q	
	repeat	7	10	O	6	23O	-2
	repeat	7	8	O	9	24O	1
	repeat	9	8	M	8	25M	1
3.19	3.46	9	11	P	8	28P	
	repeat	10	10	P	10	30P	2

	2.81	3	13	12	O	14	39O	
		repeat	13	11	R	14	38R	-1
	3.63	3.4	11	12	O	9	32O	
		repeat	10	11	N	11	32N	0
x	4.00	3.96	9	4	M	10	23M	
		repeat:	10	7	M	8	25M	2
	3.01	3.24	5	7	M	4	16M	
		repeat:	4	6	L	5	15L	-1
	3.73	3.78	7	5	L	8	20L	
		repeat:	10	6	O	12	28O	8
		repeat:	11	7	S	9	27S	-1
	3.73	3.80	8	8	R	7	23R	
		repeat:	9	10	Q	9	28Q	5
		repeat:	8	9	R	9	26R	-2
	3.23	3.09	7	9	N	9	25N	
		repeat:	8	10	M	10	28M	3
	3.74	3.86	7	10	R	8	25R	
		repeat:	8	8	Q	8	24Q	-1
	3.75	3.82	7	9	Q	8	24Q	
		repeat:	8	11	L	10	29L	5
	3.38	3.63	7	9	Q	9	25Q	
		repeat:	7	10	O	6	23O	-2
	3.74	3.69	8	10	O	9	27O	
		repeat:	7	10	L	11	28L	1
	3.00	3.43	8	13	M	10	31M	
		repeat:	7	11	O	9	27O	-4
	3.45	3.56	6	5	M	8	19M	
		repeat:	8	8	M	9	25M	6
	3.86	3.90	8	8	M	9	25M	
		repeat:	8	11	O	10	29O	4
x	3.10	3.47	6	7	O	5	18O	
		repeat:	7	9	P	9	25P	7
	3.44	3.48	5	8	M	7	20M	
		repeat:	7	8	P	7	22P	2
	3.63	3.80	7	8	S	6	21S	
		repeat:	7	6	S	6	19S	-2
	2.75	2.93	6	3	M	8	17M	
		repeat:	7	7	N	10	24N	7
	3.22	3.46	6	8	M	9	23M	
		repeat:	7	9	M	11	27M	4
	3.38	3.50	8	10	P	8	26P	
		repeat:	8	9	Q	9	26Q	0
	3.13	3.35	6	7	Q	8	21Q	

		repeat:	6	6	O	6	18O	-3
		repeat:	6	8	N	6	20N	2
	3.20	3.40	8	10	N	9	27N	
		repeat:	6	6	M	8	20M	-7
		repeat:	8	9	M	9	26M	6
x	3.84	3.88	7	7	P	8	22P	
		repeat:	10	10	Q	9	29Q	7
	4.00	3.85	8	11	S	11	30S	
		repeat:	10	10	Q	9	29Q	-1
	3.21	3.59	6	9	M	8	23M	
		repeat:	8	10	M	11	29M	6
	3.88	3.74	6	10	Q	8	24Q	
		repeat:	7	12	O	11	30O	6
	3.38	3.80	6	9	L	8	23L	
		repeat:	6	9	O	9	24O	1
	3.88	3.91	11	8	Q	10	29Q	
		repeat:	10	9	M	13	32M	3
	3.13	3.45	6	8	P	7	21P	
		repeat:	7	10	P	10	27P	6
	2.54	2.98	6	8	O	6	20O	
		repeat:	8	11	N	9	28N	8
	3.40	3.53	7	8	L	9	24L	
		repeat:	9	9	O	11	29O	5

Mean Change: 2.0  
Std Deviation: 2.0  
Range: -7 to +8  
N: 54

The improvement of 2.0 points is statistically significant.

**Appendix VI: MCAT and GPA Grid for Applicants and Acceptees to U.S. MD Medical Schools, 2005-2007 (aggregated) from aamc.org**

Acceptance rate for applicants, 2005-2007 (aggregated)		Total MCAT Scores										All
		5-14	15-17	18-20	21-23	24-26	27-29	30-32	33-35	36-38	39-45	
<b>GPA Total</b>	<b>Applicants and Acceptees</b>											
<b>3.80-4.00</b>	<b>Acceptees</b>	3	17	99	397	1,461	3,776	4,890	3,942	2,245	846	17,676
	<b>Applicants</b>	84	187	515	1,425	3,059	5,099	5,719	4,408	2,444	910	23,850
	<b>Acceptance rate %</b>	3.6	9.1	19.2	27.9	47.8	74.1	85.5	89.4	91.9	93.0	74.1
<b>3.60-3.79</b>	<b>Acceptees</b>	6	18	130	477	1,519	3,804	4,524	3,066	1,320	366	15,230
	<b>Applicants</b>	213	385	982	2,270	4,307	6,380	5,888	3,663	1,535	412	26,035
	<b>Acceptance rate %</b>	2.8	4.7	13.2	21.0	35.3	59.6	76.8	83.7	86.0	88.8	58.5
<b>3.40-3.59</b>	<b>Acceptees</b>	8	24	134	397	1,209	2,873	3,295	1,926	698	174	10,738
	<b>Applicants</b>	318	592	1,261	2,461	4,392	6,257	5,210	2,629	917	208	24,245
	<b>Acceptance rate %</b>	2.5	4.1	10.6	16.1	27.5	45.9	63.2	73.3	76.1	83.7	44.3
<b>3.20-3.39</b>	<b>Acceptees</b>	4	18	114	378	713	1,418	1,590	848	286	61	5,430
	<b>Applicants</b>	364	629	1,282	2,339	3,445	4,304	3,443	1,540	469	86	17,901
	<b>Acceptance rate %</b>	1.1	2.9	8.9	16.2	20.7	32.9	46.2	55.1	61.0	70.9	30.3
<b>3.00-3.19</b>	<b>Acceptees</b>	3	16	76	232	390	597	629	296	112	20	2,371
	<b>Applicants</b>	489	626	1,041	1,683	2,125	2,310	1,808	771	215	37	11,105
	<b>Acceptance rate %</b>	0.6	2.6	7.3	13.8	18.4	25.8	34.8	38.4	52.1	54.1	21.4
<b>2.80-2.99</b>	<b>Acceptees</b>	3	9	31	127	196	214	180	94	32	13	899
	<b>Applicants</b>	411	463	754	974	1,168	1,033	702	343	83	24	5,955
	<b>Acceptance rate %</b>	0.7	1.9	4.1	13.0	16.8	20.7	25.6	27.4	38.6	54.2	15.1
<b>2.60-2.79</b>	<b>Acceptees</b>	1	8	24	53	66	83	66	33	12	2	348
	<b>Applicants</b>	333	328	391	520	533	490	300	124	33	4	3,056
	<b>Acceptance rate %</b>	0.3	2.4	6.1	10.2	12.4	16.9	22	26.6	36.4	50.0	11.4
<b>2.40-2.59</b>	<b>Acceptees</b>	0	3	5	17	24	22	27	10	2	0	110
	<b>Applicants</b>	224	188	226	255	243	200	133	40	12	0	1,521
	<b>Acceptance rate %</b>	0	1.6	2.2	6.7	9.9	11.0	20.3	25.0	16.7	0	7.2
<b>2.20-2.39</b>	<b>Acceptees</b>	0	2	3	7	7	5	5	1	1	1	32
	<b>Applicants</b>	160	98	101	105	89	65	39	12	6	1	676
	<b>Acceptance rate %</b>	0	2.0	3.0	6.7	7.9	7.7	12.8	8.3	16.7	100	4.7

<b>2.00-2.19</b>	<b>Acceptees</b>	0	3	0	3	0	1	1	2	0	0	10
	<b>Applicants</b>	83	47	34	32	25	19	12	9	1	0	262
	<b>Acceptance rate %</b>	0	6.4	0	9.4	0	5.3	8.3	22.2	0	0	3.8
<b>1.47-1.99</b>	<b>Acceptees</b>	0	1	1	0	1	0	1	0	0	0	4
	<b>Applicants</b>	26	22	15	13	15	7	6	2	0	0	106
	<b>Acceptance rate %</b>	0	4.5	6.7	0	6.7	0	16.7	0	0	0	3.8
<b>All</b>	<b>Acceptees</b>	28	119	617	2,088	5,586	12,793	15,208	10,218	4,708	1,483	52,848
	<b>Applicants</b>	2,705	3,565	6,602	12,077	19,401	26,164	23,260	13,541	5,715	1,682	114,712
	<b>Acceptance rate %</b>	1.0	3.3	9.3	17.3	28.8	48.9	65.4	75.5	82.4	88.2	46.1

Source: AAMC Data Warehouse:Applicant Matriculant File, As of 2/22/2008.

## Appendix VII: Letters of Recommendation

Examples of non-helpful and helpful faculty letters of recommendation. (These are actual, intact UI or UW letters. The *only* change from the original has been the elimination of the students' names.)

Compare:

I. "Mr. XXXX XXXX has requested that I submit a letter on his behalf concerning his application to Medical School. I have had limited contact with XXXX; he was enrolled in an introductory Microbiology course that I taught and retook the course one year later. His course grade was a B. Since the average for the course was a C, I feel this grade reflects his performance as above average. He occasionally stopped by my office for clarification of lecture material and he strikes me as a polite and articulate young man. Other than his classroom contact I have no other knowledge of his academic performance or personality."

II. "Ms. XXXX was a very good student in my Organic Chemistry course, Chem 337 Honors, a very rigorous and highly demanding class for outstanding students whose interests lie in the areas of biology, biochemistry, chemistry, genetics, and medicine. She proved to be a very hard-working and highly motivated student with a strong record of accomplishments.

XXXX is a candidate of demonstrated achievement, and I commend her to you with enthusiasm."

III. "XXXX has requested that I provide you with a letter of recommendation. She was a student in my Organic Chemistry Laboratory course during the Spring 1997 semester. She worked well in this class and earned the grade of A. Unfortunately, I am unable to provide any further information as this was my only contact with her."

IV. "This letter is in support of XXXX's application to your "pre-med" program.

XXXX was a student in my General Chemistry class in the Summer of 94. This is a very demanding eight week course covering all of the material in a typical 16 week general chemistry course. XXXX finished eleventh out of a class of thirty students. (There was an exceptional number of very bright students in this class.) She received the last A before the A- cut. She worked hard and showed interest in the course, asked good questions, etc..., I would rate her very strong academically based on her performance in this course.

I can't comment much on her personality simply because I didn't know her that well. She didn't give me any trouble, but she didn't really stand out either, so????.

I don't know her well enough to give her a strong recommendation. However, based on her academic performance and motivation I believe she will do well in your program."

V. "I have only the highest praise for XXXX. XXXX took my honors "principles" course two years ago. He was one of those rare students that tries to see how much they can learn in one quarter. He was not content to merely learn the text material. He was always asking about extensions of the logic, and what the limits of the analysis were. Occasionally, I have students who seem genuinely interested in the material. They are usually planning on being economics majors, or at least some sort of social science major. XXXX had no such intention: he was just interested.

I particularly remember how XXXX went about a minor research paper that was part of the course. I gave students a list of agencies and institutions such as the FDA, the Interstate Commerce Commission (ICC) and the like. Each student had to write four or five pages on the history and mission of that agency. XXXX picked the ICC, more or less randomly. Instead of just doing some routine library work, he actually decided to see if he could test whether the ICC raised or lowered trucking rates. He checked on rates before and after trucking was largely deregulated at the federal level. He found some primary source data and took an interesting stab at the question. It bowled me over that a sophomore, and a nonmajor at that, would even contemplate such a task, no less carry it forward with some degree of skill. He's a rare bird.

On top of all this, XXXX is one of the most pleasant, self-effacing people I have ever met. He was a delight to have in class, and he has kept in contact with me in the past two years. He has tremendous integrity and very high personal standards. His transcript speaks for itself, but beyond the excellent grades, this is truly a fine young man. I wish him all the best in the medical profession."

VI. "I am writing in support of XXXX XXXX's application to medical school. I have known XXXX for over four

years, as a student in four of my courses, and as my advisee for two years. She has continued to communicate with me since changing majors from nutrition to zoology, and thus I feel that I am in a good position to evaluate XXXX's strengths. After four and a half years of knowing her, I am unable to think of any weaknesses. Of the five thousand students I have taught, XXXX is the brightest. Not only can she memorize information readily, she also seeks to understand and to tie new concepts to those she already knows. She is a true scientist, extremely curious and wanting to know "why" things happen as they do. She was the one student who actually read the text before class and asked the tough questions during lecture. Her assignments were always on time, if not early, and were of the highest quality. In addition, her exams were so complete and well written that they served as the standard for the class.

Not only is XXXX an excellent science student, she also has outstanding communication skills. She can write in-depth research papers, articles for the public, and creative short stories with equal ability. Her oral communication skills are also excellent, whether communicating one-on-one or presenting to a group. She is clear, concise, and organized in her thinking and communicating.

Two of the courses XXXX took from me included labs, so I was able to observe XXXX's interactions with her peers. She is a team player, who does her share of the work and more; however, she never takes over or makes other students feel inferior. She is intense and serious about her work, yet always willing to laugh at herself in a tense situation. Her unflappable nature and good humor make her a favorite of the other students and faculty.

Many bright science students are one-dimensional; this is not true of XXXX. She is athletic, participating in intramural sports. In addition, she is a gifted musician who plays the flute and sings. She has taken jazz chorus and orchestra as electives, and I was overwhelmed when I heard her sing in a talent show. Not only did she have a great voice, but her stage presence was outstanding.

A woman of many interests and abilities, XXXX has talked about medical school since she was a freshman. Her experience volunteering at a hospital in the Los Angeles area while she was working at Disneyland convinced her that medicine was the right career for her. Hospital experiences since that time have confirmed her decision.

I would love to have XXXX XXXX as my physician. She is extremely intelligent, thorough, kind, humorous, and well-rounded. Her communication skills are excellent. Although she is very talented, she is very down to earth. Best of all, she has great compassion. We need more physicians like XXXX. Thus, I strongly encourage you to accept XXXX XXXX into medical school, and I look forward to the day when she is an M.D."

Which letters give the admissions committee some real insight that could not be interpreted from these students' transcripts? Letters I, II, III and IV are essentially worthless. Their only value is in making the quota of required numbers of faculty letters. They provide nothing beyond what could be gleaned from just your transcripts. Of all the people you know, these are *The Best, Most Revealing* letters that you can gather? Mediocre letters or letters that state the obvious (how you did in a course) without any true insight do not help your application, and in fact, may hurt your application since they indicate that people do not get to know you very well & you don't really stand out.

Again, provide your letter writers with very solid, very positive, personal aspects to write about. Visit them, talk with them, listen to their advice. Get to know them and let them get to know you! Let them know of your goals and directions. Give them a WRITTEN resume of your accomplishments, activities and experiences – including what you learned about yourself from these experiences - and let them read your AMCAS personal comments section. It can't hurt to scan your picture into the resume you give them.

Getting excellent letters of recommendation is something that you can **and must** work towards. Also, it is something that takes time. Start laying the groundwork long before you need the letter.

(BTW: Students mentioned in letters I, II and III were not successful but students in letters V and VI were. Student IV was non-Idaho and we do not know.)

## Appendix VIII: Where have they gone?

Where have our successful applicants to medical school gone (1986-2010):

WWAMI (Univ. Washington)		72
Uniformed Services, Bethesda, MD	19	
Univ. Utah	16	
Univ. Osteopathic Med. & Health Sci. (Des Moines, IA)	12	
Western States College Osteopathic Med. Pacific (COMP)	12	
Kirksville College of Osteopathic Medicine	8	
Univ. Nevada	8	
Loma Linda Univ.	6	
Creighton Univ.	5	
Kansas City College of Osteopathic Medicine	5	
Midwestern College of Osteopathic Medicine, Arizona	5	
Touro Univ, College of Osteopathic Medicine, Nevada	4	
Lake Erie College of Osteopathic Medicine	3	
Midwestern College of Osteopathic Medicine, Chicago	3	
Oregon Health Sciences University	3	
Dartmouth	2	
Northwestern Univ.	2	
Pacific NW College of Osteopathic Medicine (Yakima, WA)		2
Rocky Vista College of Osteopathic Medicine	2	
St. Louis Univ.	2	
Tulane	2	
Univ. Kansas	2	
Univ. New England College Osteopathic Med. (Biddeford, ME)	2	
AT Still College of Osteopathic Medicine, Arizona	1	
Chicago Med	1	
East Virginia Univ	1	
Einstein	1	
Emory	1	
Georgetown	1	
Harvard	1	
Iowa	1	
Johns Hopkins Univ.	1	
Mayo	1	
Medical College of Wisconsin		1
Medical Univ of Ohio	1	
New York Medical College	1	
Penn State Univ.	1	
Touro University College of Osteopathic Medicine, SF	1	
Univ. Connecticut	1	
Univ Hawaii	1	

Univ. Maryland	1
Univ. Michigan	1
Univ. North Dakota	1
Univ. Rochester	1
Univ. Texas Southwestern	1
Washington Univ. (St. Louis)	1
Wayne State Univ.	1
West Virginia College of Osteopathic Medicine	1

## Appendix IX: Interviews

Most interviews seek to:

1. Determine whether you can think.
2. Determine whether you can communicate effectively.
3. Determine whether you can get along with people.
4. Determine your motivation to pursue medicine.
5. Determine how you handle a stressful situation.
6. Determine whether you are enthusiastic about their program. (Hint: be enthusiastic about their program.)
7. Sell their program to you. (Probably the most common goal.)

A primary care physician may deal with 30-35 patients a day and may spend less than 10 min with a patient. Efficient oral communication is a must and the interview is indicative of a necessary skill.

Interview format:

The interviews of most medical schools are one-on-one. That is, you interview with a single interviewer for 30-60 min then go on to the next interviewer. Generally the medical school interview consists of one to three such one-on-one meetings. Some medical schools, for example the University of Washington, hold panel interviews where you face a group of two to four (and usually three) interviewers.

One-on-one or panel interviews may be either open-file or closed-file. Interviewers in an open-file interview have reviewed your file including grades, MCAT scores, personal statement, letters of recommendation, etc. In closed-file interviews, the interviewer has either seen nothing in your file or just your AMCAS or AACOMAS personal statement (or an essay in your secondary application). The point of the closed-file interview is to remove any bias that might exist in your file and address how you come across to someone who does not know you. In either case, be very sure you can discuss any and all comments you made in the AMCAS/AACOMAS and secondary application essays.

Before going into any interview, reread the essays that were transmitted to that program. Also, be prepared to discuss problems with application such as a low MCAT score or some low grades or inconsistent MCAT scores and grades. Know what mistakes you've made and what you have learned from them. If you are asked a question the answer to which you truly do not know, admit it - don't try to bluff your way through it. The interviewer doesn't expect you to know everything about everything.

If you can, get to the school a day or so early. If at all possible, stay with a current med student in the program with which you are interviewing - ask that student(s) many questions and listen attentively. Tour the campus ahead of time and know exactly where your interview will take place. If possible, sit in on a med school class. You want as much knowledge about the program as possible.

Expect to be nervous. If you are taking the interview seriously you will be somewhat nervous and anxious – that's OK. Keep in mind that everyone else is nervous and that the interviewers take that into consideration. It's not necessarily the best to come across as extremely cool, collected, and absolutely confident.

Make eye contact and don't fidget. It's generally not a good idea to jot down extensive notes during the interview as that disrupts the rapid flow of the interview.

Pay attention to the name of the person interviewing you. If you can, use that person's name once or twice during the interview. That shows you're relating to the interviewer as a person and that you pay attention to detail.

Be courteous to everyone you interact with: EVERYONE!

Appearance: Dress neatly. Be well groomed.

Be on time. (Being late is a GREAT way to get the admissions committee upset.)

*Show them you take this opportunity very seriously.*

Questions during interviews:

General strategies:

Expect anything! And *keep your cool* (even if the water glass is glued to the table or you're asked to open a window that's nailed shut).

Be prepared to answer questions to which the interviewers already have the answers. The interviewer may not have taken the time to go through your file. Don't say, "like it says in my application" because it can be interpreted as "if you had only taken the time to read my application carefully, you would not have asked such a silly question". During the interview, do not say "like I said before. . ." for the same reason.

If you don't understand the question, ask for a clarification. When asked a question that comes from out-of-left field, something totally unexpected, many students launch into an answer and quickly begin to ramble off on tangents of tangents. This can annoy the interviewer and chew up valuable time. The best strategy when asked a tough question is usually to pause and organize your thoughts before speaking. And make sure you do not try to give them the answer that you think they want to hear - it doesn't work. (On the other hand, if you're interested in going into medicine primarily for the money, prestige, and/or to satisfy your parents' wishes, for example, don't give these as the major/important reasons no matter how true they are.)

If/when you are asked an ethics question which begins >A patient of yours comes to you and wants XXX, what would you do?=?, where XXX is an abortion, a pack of cigarettes, medicinal marijuana, etc., it is important to be flexible so as to serve the patient. You should not give the impression that you are so rigid, because of your own philosophies and doctrines, that you cannot do what is in the best medical interests of you patient. For example, if you firmly are opposed to the concept of abortion and are not willing to perform one, regardless of the circumstances (e.g., youth, rape, incest), but this procedure would be in your patient=s best interests, consider referring her to another physician. You must act in the best interests of your patient even if that requires some bending on your part.

There is a set of questions to which you MUST have an organized, well-thought out, logical answer. We recommend that you outline answers to make sure that they are comprehensive and logical. Then verbalize the answers to some *unbiased* person(s). Thinking things through in your own mind is not as effective as orally trying to convince someone else (like an interviewer). So do your homework and be prepared for these:

1. *Why do you want to pursue a career as a physician? Why not a nurse, dentist, teacher, etc.?* (Your answer should be based on your personal experiences and not on lofty ideals or buzz words.) If you're applying to an osteopathic medical program be prepared for the question: *Why do you want to be an osteopathic physician?*

2. *Why are you applying to **this** medical school?* Saying that they take out-of-state students or that your pre-med advisor recommended it won't impress anyone. Be very familiar with their program: their philosophy, where their graduates have gone, etc. If you know someone who has graduated from the program, talk with them extensively about all aspects of the medical program. Read their bulletin prior to the interview. Carefully check their web site. Contact the medical student associations on that campus for information about programs unique to that medical school.

3. *Considering the large number of highly qualified and impressive students applying to our program, why should we choose you?* Don't be suckered into comparing yourself to the average applicant. (For example: I'm more motivated to go to medical school than most of your applicants.) You don't know what their average applicant, you don't have the data, so you can't legitimately make any comparisons. Stick with enumerating your qualities and why those qualities would make you an asset to their program and to the profession.

4. *Do you have any questions for me? Any questions about our program?* You should be very familiar with their program at the time you walk into the interview. A lack of questions on your part could be due to their having cleared up **everything** or perhaps that you haven't given much thought to their program and where it can take you. Don't ask trivial questions such as how they grade, how many students are in their class, and what the weather is like. Ask meatier stuff concerning research opportunities, outreach/international opportunities, emphasis on prevention, placement success of their graduates into residency programs, etc.

5. *What is your plan B? That is, if you're not accepted, then what?* It is important to indicate that you will try to learn as much as possible about why you were not successful and that you will try again. However, you have to be prepared for the question: *What if you are never accepted into medical school?* It is imperative that you have a viable, realistic, long-term career option. Ideally, it should share characteristics with the rationale you give for why you want to go into medicine in the first place. For example, one of the reasons you give for wanting to become a physician is that you really enjoy working with and helping people; however, your Plan B is becoming a computer scientist working in a setting where you interact with relatively few people and you have relatively little impact on people's lives. With this kind of answer, admissions committees will seriously question your genuine motives for wanting to become a physician. If, however, you mention that Plan B is becoming a Physicians Assistant or going into Public Health, such an answer will reinforce your rationale for wanting to become a physician.

6. *What do you see yourself doing in 5, 10 or 15 years?* What will be the nature of your practice? What will you be doing? In what environment/setting? How will you be balancing your professional life? It's important to have a not-too-exact vision of where you are headed.

7. At the end of the interview: *Is there anything that we have not discussed that I should*

*know about you? . . . that you would like me to know about you?* Have a mental checklist of topics you hope will have come up in the interview, such as hospital experience, community involvement, international experience, athletics & sports accomplishments, positive trends in your grades (e.g., your freshman year was awful but then you became focused and motivated and your grades show this), having been present at the birth or having given birth to your child, etc. If one of these topics hasn't come up during the interview, you're prepared to bring it up and deal effectively with it now. You've got to sell yourself; you've got to convince them that you want their program and they should want you because of the unique person you are.

And if you're applying to the D.O. programs:

8. *Why are you interested in osteopathic medicine?* (Why do you want to be an osteopathic physician?) Compare osteopathic versus allopathic medicine. (The safest answer is probably based on your desire to provide medical care as a physician. Since there are two accepted paths to becoming a physician – MD & DO, you're taking both paths because you're keeping an eye on your goal. It's probably best not to say you have a preference for DO [unless you really do]; just emphasize that you're focused on your goal and either path is fine and will get you there.)

9. *Who was Andrew Taylor Still?*

Again, when you go for an interview, it's important to have some reasonable idea of how you'll pay for medical education. Take a look at AAMC's FIRST (Financial Information, Resources, Services, and Tools) site: [https://www.aamc.org/services/first/first\\_for\\_students/](https://www.aamc.org/services/first/first_for_students/)

Beyond that basic set of questions, there are an *infinite* number of questions that they may ask. Answer the interviewer's question; don't try to shoehorn one of your prepared answers into the question. Below are some that have been asked of our applicants. Keep in mind, however, to expect the unexpected. Use your personal experiences to explain the rationale behind your answers. Don't be afraid to voice strong opinions or positions; you don't want to come across as a 'mediclone' (derogatory term applied to candidates which all look alike {Michael Greger, My Advice to Medical School Applicants}.) Rather than have pat answers to the questions below, use them to develop a strategy of tackling questions. Pause, organize, then present your answer and don't ramble.

Group 1. Questions about you:

Tell me about yourself. What should I know about you?

Why are you here?

Do you like yourself?

How did you develop your values?

How did you develop your personality?

What makes you tick?

If you could do something over again, what would it be? Why?

How many brothers and sisters and what do they do? What do your parents do?

How do you go about writing an essay exam? How do you organize your thoughts?

Tell me about growing up in a small town.

What did you learn from working at the gas station/casino/lumber mill etc?

What are your hobbies? What do you do for fun? What do you do in your spare time? What have you done besides study

a lot? If you can't do your favorite activity, what will you do then? What do you do for exercise?  
 Do you think that a sense of humor is important? (and of course:) Why?  
 Tell me a good joke.  
 What is your greatest achievement? Biggest regret?  
 How would you describe yourself in terms of your greatest strengths and weaknesses?  
 If you could change one thing about yourself, what?  
 What is your biggest fault?/What is your biggest blunder in life?  
 What one word would your friends use to describe you?  
 What would a person who knows you well consider to be your best and worst qualities?  
 What about you is a strength AND a weakness?  
 Tell us something crazy/unique about yourself.  
 What has been your most challenging relationship?  
 What has been your greatest challenge in life?  
 How will you prioritize/balance your life in 10 years?  
 Discuss a tragedy in your life and how you dealt with it and resolved it.  
 What are you proudest of?  
 Looking back at your high school years, what did you gain from them?  
 As a premedical student, what skills have you learned to manage your time and relieve stress? (What stresses you out?  
 How do you handle stress?)  
 If you could be granted three wishes, what would they be, and why?  
 If you had \$100 and a day to do anything, what would you do?  
 Discuss a time in your life when you have been "put down" and how did you react to it?  
 What types of books do you enjoy reading? What did you learn from the last book (nontext book) you read?  
 What books, films, or other media come to mind as having been particularly important to your non-sciences education?  
 Describe a situation in which you have endured criticism, constructive and not.  
 If you have wronged someone, what do you do about it?  
 Have you ever seen a traffic accident? How did you react? Describe.  
 What is the most hilarious movie you have ever seen?  
 If you were locked in a library overnight, in what section would they find you in the morning?  
 Why did you choose to attend XXX University?  
 Why did you choose your undergraduate major?  
 How have you tried to achieve breadth in your undergraduate education? What humanities have you taken?  
 What has been your favorite (non-science) undergraduate class and why?  
 Do you feel that your education at a community college was easier than the education at the university level?  
 We see you have many A=s. Do you work hard to achieve A=s?  
 If you could invite four people from the past to dinner, who would they be, and why? What would you talk about?  
 Do you have any blemishes in your academic record? If so, what are they and why did they occur?  
 Talk about your role as a team leader in sports/student government.  
 Do you have any pets? You have a snake/ferret/hermit crab etc as a pet. Why?  
 What kind of leadership qualities do you have? How have you demonstrated leadership in the past and how will you  
 assume leadership in the future? What is leadership? How can a person be a good leader?  
 How do you solve problems? What activities have you participated in that demonstrate this?  
 What have you done since you graduated from college?  
 How many hours each week to your children spend on the computer?  
 What does your husband (wife) do?  
 Your father is an M.D., does he agree with your decision to become an osteopathic doctor?  
 What makes you angry?

**Group 2. You as a medical school applicant:**

How do you know you'll *enjoy* spending time with sick people?  
 Have you had any other interviews? Where?  
 So, you applied to both MD and DO schools?  
 You mentioned that you work with both MD and DO practitioners; have you noticed any differences in how they practice  
 medicine? (Question at a DO interview.)  
 What excites you about medicine in general?  
 What activities or accomplishments indicate your interest in medicine? (& How have you demonstrated self-  
 motivation in other aspects of your life?)  
 Do you know what you're getting into? How familiar are you with the lifestyles of medical students and physicians?

What do you consider to be advantageous and disadvantageous about becoming a physician?

What makes you think that you would be a good doctor? What qualities do you have that are different and desirable for a medical doctor?

How have the jobs, volunteer opportunities, or extracurricular experiences that you have had made you better prepared for the responsibilities of being a physician?

What travels have you taken, and what exposure to other cultures have you had?

- or- What did you learn about the culture, and how did that change how you went about your job?
- and- How will this experience make you a better physician?

Are you a soft-hearted person?

What personality types do you hang out with?

Tell me about a patient you have taken care of.

- and- What patient stands out the most in your mind and what did you learn from him/her?
- and- Based on a student's volunteering in the ER: Have you ever followed up on a patient that was admitted into the ER while you were there? What ultimately happened to that patient? And: Is there a particular night or event from the ER that you remember well? What was wrong with the patient?

Thinking of examples from your recent past, how would you assess your empathy and compassion?

What do you think a typical medical school day involves? How many hours of study?

How do you envision using your medical school education. Where do you see yourself in 5, 10, 20 years?

How has your undergraduate research experience better prepared you for a medical career?

- or- Tell me about your research. It seems like you are pretty excited about it.

Tell us about your research at the hospital and its outcome. Is the hospital still conducting this research? What are they finding?

What do you know about the current trends in our nation's health care system?

Tell me what you believe to be the most pressing health issues today. Why?

- or- What is wrong with the health-care system? Followed (of course) by: How would you fix it if you were in charge?
- or- Pick any topic concerning health care today and discuss it.

What=s the biggest problem with preventative medicine in America today? (Cigarette smoking kills 450,000 per year.)

How could you fix health care with one solution?

What do you feel are the negative or restrictive aspects of medicine, from a professional standpoint?

For a female applicant: How will you handle having a medical practice and a family at the same time? How will you do it? (What about a career, marriage and family?)

What are some good and bad qualities you have observed in emergency room physicians?

What are the top four qualities for a good physician? Do you have these qualities?

You've moved to a new city. How do you choose a physician?

Have you ever seen "bad judgment" in a doctor's office or hospital by a doctor or staff?

If you had to choose between clinical and academic medicine as a profession, which would you pick? What do you feel you would lose by being forced to choose?

What field of medicine would you like to enter and why?

You look very calm right now. Are you always this calm?

Where would you like to practice? If selected would you return to Idaho and why?

Physicians in what medical areas call themselves generalists?

How could you as a physician contribute to reducing the cost of health care to your patients?

What can we do to insure more children in the US?

Can you discuss the following issues in medicine?

- Medicare payment cutbacks?
- patients shopping for the lowest priced care?
- chemical dependency and substance abuse among health care providers?
- handguns?
- socialized medicine?
- tobacco as addictive? (and your stance on regulation)
- child abuse?
- surrogate mothers?
- health care reform? HMOs? PPOs?

(What are the positive and negative aspects of HMOs?)

- assisted suicide?

You appear to have done a variety of things. It would appear that you are unfocused. Please comment.

What is "success", in your opinion? After 20 years as a physician, what kind of success would you hope to have

achieved? Please explain.

What qualities do you look for in a physician? Can you provide an example of a physician who embodies any of these ideals? How do they do this?

What kind of experiences have you had working with sick people? Have these experiences taught you anything that you didn't know beforehand?

What family members, friends, or other individuals have been influential in your decision to pursue a medical career?

What special qualities do you feel you possess that set you apart from other medical school candidates? What makes you unique or different as a medical school candidate? What distinguishes you from other qualified applicants?

What kind of medical schools are you applying to, and why? And: How many and which other medical schools are you applying to?

Where on your list of medical programs is this program? (For example, where is the University of Utah on your list of preferences?) Have you applied to other medical schools?

Pick any specific medical school that you are applying to, and tell the interviewer about it. What goes on there, and what makes it particularly desirable to you?

What general and specific skills would you hope an ideal medical school experience would give you. How might your ideal school achieve that result?

Talk about your father's/mother's/brother's death. How will you handle death? What experiences have you had with death and dying?

How are you in a one-on-one setting with a patient?

How did you prepare for this interview? What did you read on the plane on your way to this interview?

Tell me everything you know about the anatomy/physiology of the human visual system.

How will you finance your medical education?

What percentage of the graduating medical school class will you be in?

Tell me about your grades/MCAT scores.

Your MCAT scores dropped by 1 point the second time you took the test. Is there a reason?

Tell me about your friend's cancer (mentioned in AMCAS statement). Do you know about the disease? Did you read up on the disease? Did you talk to your friend's physician about the disease?

When did you decide to become a physician and why?

Discuss any experience you have had related to a career in medicine.

What is a current breakthrough in medicine? How is it beneficial?

Why did you decide to choose medicine and not some other field where you can help others, such as nursing, physical therapy, pharmacology, psychology, education, or social work?

How have you tested your motivation to become a physician? Explain...

How do you feel about death?

Tell me about your pre-med advisor. What characteristics does he possess that you like?

How can you address your patients' needs most effectively?

How can you better prepare yourself as a physician? What was the most significant disease of the 20<sup>th</sup> century? Why?

What have you done to demonstrate your interest in becoming a physician?

Would you consider working in a rural health care setting, even though your career might not be as lucrative?

Are you used to getting A's? If so, what will you do if you don't get A's (honors) in medical school?

If medicine were a lump of clay, how would you mold and shape it? What do you want to do with medicine?

What do you think your chances of acceptance are and why?

We're thinking of implementing an honor code. What do you think of this? What would you do if you saw a fellow medical student cheating?

What would a typical day as a family practitioner be like? What time would you be at work? Home? Own practice or in a clinic? Would you visit your patients in the hospital? When?

What are the characteristics of a good primary care physician?

Convince me why I should recommend you to the admissions committee over any other candidate. What sets you apart from other applicants? What makes you think you are a good candidate for admission?

Do you think your application has any weak spots?

Do you think spirituality should exist in the medical field? If you are a Christian and you have a Buddhist patient who is spiritual, do you try and relate to him from a spiritual standpoint?

(At a DO interview) Did you apply to M.D. schools as well?

### Group 3. Society related questions.

What makes health care so expensive?

What do you feel are the social responsibilities of a physician?

What is the most important social problem facing the United States today, and why?

How should society deal with the problem of child abuse?

How do you think national health insurance might affect physicians, patients, and society?

How do you think insurance helps the doctor-patient relationship? How do you think it hurts the doctor-patient relationship?

In what manner and to what degree do you stay in touch with current events? What is a major non-medical issue in the news? What were the major news events last year?

Imagine the medical technologies of the year 2020. How do you think those technologies will affect you and how do you think you will deal with them?

#### Group 4. Ethics-related questions:

Are you aware of any current controversies in the area of medical ethics? List and discuss some of these.

Have you personally encountered any moral dilemmas to date? Of what nature?

How do you feel about euthanasia or medically-assisted suicide?

Of an older person, of a middle-aged person, of a child?

With the consent of the family? Without the consent of the family?

If the patient is in a coma? If the patient is terminally ill?

Could you pull the plug?

How do you think the current "overflow" of patients into our emergency rooms could be solved?

How might you deal differently with a terminally ill patient, as opposed to other patients?

There are only four units of blood and you are in a major emergency with a wide assortment of patients from all ages, backgrounds, and occupations. Who receives the blood and why?

What would you do if a 12 year-old girl came into your office asking for birth control pills? And: A 13 year old girl comes to you for birth control. She and her family have been friends of yours for years. What do you do?

What do you think of abortion? Could you perform one? What if . . . then could you perform one? Would you recommend other physicians to the woman who wanted an abortion?

Will you accept training to perform an abortion?

When do you withhold life support? And: An 81 year old woman has no brain activity but is able to breathe on her own. She requires feeding tubes and IV=s. Why keep her alive?

What would you do if you found out that one of your colleagues was taking drugs? embezzling funds?

Should we allow AIDS victims to apply to/attend medical school? Should physicians with AIDS be allowed to practice medicine? Do physicians have the right to refuse treatment to patients with AIDS? (How is AIDS transmitted from one person to the next?)

Why are so many teenagers killing themselves today?

Can you think of any instance in which you would refuse treatment to a patient?

Transplant a human brain: comments?

Do frozen embryos have rights?

A patient has a persistent headache that has been occurring on and off for about a year but it isn't so bad that it keeps them up at night. You have determined that it is neither stress related nor sinus related, and a simple MRI (cost ~\$1500) would answer any questions about a tumor. Your HMO director is putting stress on you to keep costs low. What do you do?

A 75 year-old man is diagnosed with Lou Gehrig=s disease (ALS) and is given between 6 months and 1 year to live. He requests that you prescribe enough painkillers for him that if taken all at once would end his life. He does not explicitly say he will commit suicide, but you know that he will do so if you prescribe the medication. What do you do?

A 55 year-old man is in and out of consciousness with pneumonia that causes progressive bleeding in his trachea. This condition is terminal and he has but a few painful hours to live. His family gives consent for removal of the ventilator, he regains consciousness and begins flailing his arms and legs wildly. He also begins to scream in pain spewing blood all over the room. You can prescribe painkillers, but even a small dose would certainly be fatal. Do you prescribe medication to end his life even without family consent?

If you had an 85 year old patient with Alzheimers and failing kidneys, would you prescribe dialysis?

An elderly patient who has very poor health requests that no measures or procedures be performed on him that would prolong his life. While you were out of town, he collapses on the street and paramedics save his life and intubate the patient. When you return the patient asks you to remove the tube. (You realize that if you remove the tube the patient will die rather quickly.) Do you remove the tube?

Do you think that health care funds should be more focused on the expensive development of new technologies, or on providing adequate care for the masses who aren't insured? (Based on the previous answer:) Ok, you have a patient who is a young girl with bone marrow cancer. Because of the health care system that you advocated, procedures to treat her are considered too experimental. What do you tell her and her family? How else could

you help her since her insurance won't cover her?  
(After discussion on HMO=s) What would you do if you were in the position of trying to obtain medical care for your patient from a specialist not on the provider list but the HMO refused?

Group 5. Underrepresented group/admission related questions.

If you are not a minority, how do you feel prepared to meet the diverse needs of a multiethnic, multicultural patient population?

To what extent do you feel that you owe a debt to your fellow man?

To what extent do you owe a debt to those less fortunate than yourself? Please explain.

If you are a minority student, will you take your medical skills after you leave medical school back to your ethnic community? How will you apply your skills in that community? Do you anticipate any problems going back to that community after having finished medical training?

Group 6. Off the wall / Miscellaneous

Ok, you're the editor of Time magazine and it's December. Who's going to be your person of the year and on the cover of Time magazine? Why that person?

What is a dromedary? What is the difference between a camel and a dromedary?

How do you feel about gays in the military? (Asked by a staff member of Uniformed Services University of the Health Sciences.)

One of our students had a 1 hour interview during which the ONLY thing the interviewer said was "Tell me about yourself" -- the interviewer was silent after this comment, never called for clarification or elaboration -- nothing.

Describe with words (not using your hands) how to tie your shoes.

One of our students was told at the beginning of an interview that in the opinion of the interviewer, the student did not have competitive grades nor MCAT scores and so why did he think he even had a chance?

Finally, be prepared for the following questions after your answers:

What data do you have to support your comments? So how do you know? Who told you? Why do you believe them?

Questions which are generally off-limits (modified from the Department of Prehealth, Clark University, Worcester, MA):

Inquiries about your name which indicates your lineage, ancestry, national origin, descent or marital status. Any inquiry indicating whether you are married, single, divorced. Questions related to your spouse or number and age of children. Any questions concerning pregnancy. Questions with whom you live. Do you live with your parents? Whether you rent or own your home.

Request that you give your age or date of birth.

Inquiries that would require you to divulge handicaps or health conditions which do not relate reasonably to fitness to perform your duties.

Questions directly or indirectly related to race.

Any inquiry into your national origin. Questions whether you or your parents or your spouse are naturalized or native-born U.S. citizens.

Questions concerning your religious affiliation or religious holidays observed.

Type of discharge from the service.

Questions related to arrests.

Questions of the names of organizations to which you belong if such information indicates the race, religion, or ancestry of membership.

When you get back home, we recommend that you send a thank you card to the interviewers for their time and efforts.

Appendix X: Form filled out by the University of Washington's interviewers (2007):

## Individual Interview Assessment Form

Applicant: \_\_\_\_\_ AMCAS ID: \_\_\_\_\_

Committee Member: \_\_\_\_\_ Date: \_\_\_\_\_

Please make narrative comments in all categories. Avoid one-word responses such as O.K., fair, good, etc.

Please consider information from the personal statement, letters of recommendation, and interview when completing this form. The applicant's academic record (GPA and MCATs) are ranked separately.

### 1) INTEREST IN AND KNOWLEDGE OF HEALTH CARE FIELD AND MOTIVATION FOR MEDICAL CAREER.

Consider inquiry into and awareness of current problems affecting medicine and society in general such as access to care, distribution of resources etc. What are the sources of this awareness? Is the applicant familiar with recent "hot button" medical issues in the media? Are relevant health care experiences documented? What are goals as a physician? Are the experiences consistent with the stated goal? Consider source of motivation and steps taken to explore a career in medicine. What excites the applicant about medicine? Does the applicant demonstrate understanding of what it is like to be a doctor? Consider role models, awareness of medical lifestyle options, job satisfaction, rewards and frustrations.

Score 1 (poor) to 8 (excellent) \_\_\_\_\_

- (1) No knowledge of health care issues. No Inquiry into Medicine.
- (2-3) Motivation Questionable. Limited Inquiry into Medicine. Limited awareness of what is going on in the world.
- (4-5) Reasonable Motivation. Superficial Inquiry into Medicine. Experience not consistent with goals.
- (6-7) Well Motivated. Appropriate medical exposure. Quite Aware of Issues Facing Medicine and Society.
- (8) Passion for medicine. Great understanding of being a doctor. Outstanding Awareness of issues facing Medicine and Society.

### 2) PERSONAL CHARACTERISTICS

Assess caring attitude, warmth, compassion, empathy. Consider listening and communication skills, poise during the interview, and general demeanor. Is there a record of community service and/or involvement with people? Consider depth and breadth of experiences and interests including jobs as well as hobbies and avocations such as athletics, arts, reading, travel and international experience or other activities. Does the applicant learn from experience? Consider "teachability". What is the applicant's work ethic? Consider ability to work hard in and out of school. Can the applicant multi-task? Can s/he work as a member of a team? Does the applicant demonstrate leadership experience or potential and responsibility? Consider maturity, ability to self assess, realistic view of self, awareness of personal learning style, and ability to deal with life stresses.

Score 1 (poor) to 8 (excellent) \_\_\_\_\_

- (1) Cold, no demonstrable compassion. Poor Interpersonal Skills. Limited Life Experiences.
- (2-3) Fair Interpersonal Skills. Limited Life Experiences. Inadequately developed sense of self.
- (4-5) Caring. Good Interpersonal skills. Moderate range of interests, good self awareness.
- (6-7) Warm, caring. Very good interpersonal skills. Strong service record. A team player, hard worker. Very good self awareness.
- (8) Warm and empathetic. Poised, excellent interpersonal skills. A "people person". Wide range of experiences. A team leader.

**Appendix XI: Pearls of Wisdom** from some successful UI applicants. This section is still under construction: we would like to include your comments also.

**TB, University of Utah School of Medicine, E91** (written while a resident in Family Practice in Phoenix):

Looking back, there is not much I would have changed. It may have been nice to be able to meet with medical students and residents to help explain the real rigors of completing such an education. It is truly difficult and exhausting and it is extremely hard to turn back once the road has been traveled. It is a lifetime commitment and one that must be taken very seriously. This point must be emphasized to students and anyone who has delusions of money or prestige should turn back now. There has to be a love of helping people for this road to be at all fulfilling in the end. Well, I love what I am doing right up until the time when I have been on call for 36 hours, then it stinks.

**RG & WD, University of Nevada School of Medicine, E93** (written at end of 4th yr medical school; they have served as applicant interviewers for U. Nevada School of Medicine)

We have some suggestions that we feel will be of help to at least some applicants. These are listed in no particular order of importance. Also, these are probably not very applicable to those at the two extremes of the applicant pool.

1. Don't sign up for courses/instructors that have a reputation for giving low grades. Unfortunately, this is sometimes contrary to good learning, but essential advice for those who will be borderline. GPA is still the most important factor for deciding if you make the interview cut!

2. We both really feel fortunate that we were science majors. It certainly must have helped for the MCAT and our science background allowed us to get more out of the torrid pace of our first two years [of medical school]. For those who are committed to a non-science major we feel the following are the minimum in addition to the pre-med core: at least one semester of biochemistry, one semester of genetics, one semester of physiology (CVP was better than endocrine phys. in our experience), and a lab experience involving molecular biology assays. Also, while we did take parasitology which was a little helpful, we wished we had taken microbiology - this would have been very beneficial in our opinion. While we did take CVA, neither of us missed not taking a human anatomy course. This is not to say that showing an interest in the liberal arts is not beneficial.

3. Doing a directed study/research project is viewed favorably everywhere. In particular, students who have published will have a big advantage. In addition to being a resume booster, it gives them something to talk about during the interview that they know a lot about.

4. For interviews, being prepared to talk about your strengths and weaknesses is critical and will be asked by any good interviewer. Tell students to have thought about a couple of ethically oriented topics and to be prepared to discuss them. We are encouraged as interviewers to ask open-ended questions regarding this (allowing the applicant to pick a topic they feel strongly about).

5. Primary care is still what the committees want to hear. However, it's more important to be honest about what you really want to do because it is common to ask an applicant to demonstrate what they've done to back up their claims. This is where taking time to work with a physician really pays off.

6. A general comment regarding extracurricular activities: encourage applicants to pick one activity they are genuinely interested in and to put a significant amount of effort into this over a long period of time. This comes off as being much more sincere than someone who has a long list of superfluous activities.

7. About the MCAT: it is our opinion that people will do better on the exam if they read and study for understanding in all of their courses. Those that cram and memorize before exams tend to flush after. This is not conducive to long term retention. Hope these are of help.

**CG, University of Washington School of Medicine, WWAMI, E94:**

Before any of my **interviews**, I made sure I was familiar with all the major issues that were prospective topics of "conversation". You know them as well as I do: abortion, health care reform, medical ethics, current events, etc. While I think it is important to be up on these issues, I also believe that the interviewing committee is far less interested in what you think than how you arrived at your opinion and how you express yourself. They want to know that you are a thoughtful person who bases decisions on solid reasoning and considers all viewpoints before making a decision. Further, they want to know that you are a person capable of handling pressure. To that end, they may well make an already stressful interview more stressful by pressing you for answers, even interrupting you at times. If you have a weakness in your reasoning or have ignored a viewpoint, it will probably be exposed. This is why you need to have clear justification for any position you choose to take.

So what is my advice for the interview? First, arrive at the interview familiar with all viewpoints of the major issues. Second, be able to explain whatever position you take and don't make any statement you aren't ready to defend.

Third, and above all else, stay calm! Show the committee that you can take whatever abrasiveness they put forth and still respond intelligently and respectfully.

Basically, prepare, relax, and just be yourself. Best of luck!

## **SS, University of Washington School of Medicine, WWAMI, E94:**

College:

1. Kickass in school. Take every class seriously, even if it's irrelevant - it counts on your GPA.
2. Try to get to know some of your professors. They can actually be pretty cool. If they don't know you very well, they have to mention that in the letter of recommendation and the letter won't have as much merit. We have a small school with a lot of teacher contact. Take Advantage of IT!
3. Get some research experience - either take a job or do a directed study.
4. Get some exposure to the health field. This will make you a more legitimate candidate, and more importantly, it can help you see if this is really what you want. This better be what you really want to do because it requires way too much of you if it isn't absolutely the career you want.

MCAT: The MCAT sucks, but everyone has to take it, so get geared up for it.

1. There is way too much to study, and most of the questions are related to passages. Take lots of practice tests and get good at taking the test. It's not the kind of test you can really study for but you can get good at reading all the passages, not getting stuck, and finishing in time. You can study when you correct your practice tests - just briefly review what you don't understand. You can achieve a competitive score by just making logical guesses based on the passages and answering all the questions.
2. Settle down. Mentally prepare for going into a stressful setting to take a test. Now that the KGB is unemployed, they're giving the MCATs and it can be pretty intimidating so get prepared to go in there, get comfortable, and cruise through the all-day test to the best of your ability without getting nervous.
3. Take it in the spring so you won't get delayed in getting your application processed and you can get an early interview which will help.
4. Start taking practice tests in the fall of your junior year; take the MCAT in the spring. Turn in your AMCAS in the early summer (take your time on your personal Comments) so you can get the secondaries in before school starts again. The secondaries also require a lot of thought and you don't want to rush through them.

Interview: Plenty of advice available.

Others: Don't lose yourself in all of this. You must keep a little time for yourself to invest in the things and people you enjoy. The patterns you set now are the patterns you will keep for life so get used to setting some time aside. Not only will this help you keep your sanity and help you enjoy your journey, but it may help you get in. If you have abandoned all extra-curriculars in pursuit of this goal, it will show (because they ask!) and you will be selected against because they know you can't sustain a life like that forever. Don't be afraid to join a fraternity or sorority, get involved in an organization, develop relationships, sharpen non-academic skills, play intramurals, and just live. Med school, residency, and the professional setting are all far more demanding than the undergraduate work so develop a hardworking yet enjoyable pattern you can sustain.

Don't Forget - Hundreds of thousands of people before you have made it through all of this and you can too.

## **NM, University of Washington School of Medicine WWAMI, E96:**

Make the commitment to become a physician. The greatest factor in accomplishing any goal is a strong PASSIONATE commitment. If you are not passionate about becoming a physician either get passionate or consider another field. Your passion for medicine will show not only in your actions but also in your interview.

Remind yourself of your passionate commitment. Goals are useless unless you are able to stay focused on them. Examples from my experience: 1) I posted a copy of the admissions brochure to the University of Washington on the wall in front of my study area. 2) I got as much clinical experience as I could. This did two very important things for me. It kept me focused on why I wanted to go into medicine and rekindled that passion when I would get bogged down in all the school work. It also gave me concrete examples of why I wanted to be a physician that I could relate to my interviewers.

Develop yourself as a person. Develop your talents and interests even if they have nothing to do with medicine. Individual people are much more interesting than the clones with "pre-med" stamped on their forehead.

Choose a major you enjoy. Four or five years spent in the pursuit of an undergraduate degree is a long time to spend on something you do not like to do. If you love science, be a science major. If you have a real interest in the liberal arts, do that. But don't pick your major because you think it is what medical schools want. Of course, whatever you do, you must do it well (i.e. Good grades).

Be prepared to Work! Work! Work! You might as well get use to hard work now because medicine is a career of long hours with the average physician working over 60 hours a week. (That's after you are done with your residency.) Remember work is play and play is fun. When you study, learn through the eyes of a child, always in a state of constant

curiosity and wonderment.

Keep up with current events, not only in medicine but in all areas of life. The best source for this I found was CNN, and the Wall Street Journal. Think about what the events mean and how they fit into your belief structure. Try to make sense of it all. Not only will it make you a better citizen, but it will also give you a solid foundation to answer some of those tough interview questions.

Finally, at all costs avoid getting PMS "Pre-Med Syndrome" PMS is characterized by the following:

- 1) neurotic fixation on getting A's
- 2) always uptight
- 3) missing out on some of the best years of their life because they are uptight
- 4) whines and complains to the instructor if they do not get A's
- 5) feels it is necessary to compete with everyone
- 6) brags about how wonderful they are (i.e., their good grades, MCAT scores, all the honor societies they belong to)
- 7) joins every honor society, and extra curricular resume buffer they can find instead of picking the ones that really mean something to them personally.

These are a few ideas that I feel helped me get into the WAMI program. Good luck and remember, if you really want to become a physician you can be. Never, never, ever give up if it is what you want to really do. If you don't get in the first year keep trying. I know a guy who applied five times before he was accepted. In the end, you are the only one who will keep you out of medical school.

### **JC, University of Washington School of Medicine WWAMI, E98:**

If you are on the five-year plan, as many people tend to be, consider taking the MCAT in the August after your third year. Get a job in Moscow and do nothing but study and work that summer (volunteering in the hospital or clinic would also be positive). Moscow is nice because professors on campus can answer any question you might have, the library has many resources available on reserve, and the summer atmosphere here is very conducive to concentrating. Don't listen to people who say that you can't "study" for the MCAT, because you can. Decide what scores you want, then study as hard as it takes for you to achieve that goal. Start by buying a good review book (i.e. Columbia Review) and be sure to understand every page of it. After learning the material, work through as many practice tests, problems, and essays as you can. Before long it will be over and you'll have plenty of time to plan for the next few steps.

As far as letters of recommendation go, admissions committees read thousands each year, most of which are very similar. If you don't have any amazing letters, it probably won't be to your detriment, however, having just one or two extremely well written letters from faculty who really know you and your potential can do a lot for your application (according to the Dean of Admissions at Northwestern).

As Dr. Ingermann [pre-med advisor] says, do not underestimate the importance of interview preparation. I got the impression that UW interviewed anyone who met some threshold GPA or MCAT score and that after this "cut", maturity and motivation became extremely important. At all schools, your interviewer will ask why you want to be a doc. Take advantage of that opportunity. Think about what you might hear from hundreds of applicants, were you an interviewer, and make your answer better. Also, practice every question listed in the Pre-Med Manual. You will face many of those and the practice will also help you answer questions for which you weren't prepared.

Consider getting a minor in a foreign language. In addition to expanding your educational background, speaking a language like Spanish enables you to work with an underserved minority in Idaho and simultaneously demonstrate your loyalty to the state. A semester abroad will almost earn you a minor, not to mention the incredible life experiences and new perspectives that traditional students do not have.

### **DW, University of Washington School of Medicine WWAMI, E98:**

Advice? Not sure how to offer any in the face of a process that seems random, capricious, and difficult to decipher. I think the very most important thing is to remember this, above all else, especially when the interviews you were hoping for aren't rolling in, or the acceptances you expected turned out to be rejections. The process is not about you personally, even though we cannot help but take it that way at times. It is initially about names (your school), numbers (your grades and scores), and only after you are screened for these can your little light shine out against the horde of other candidates that you are 'competing with' for the relatively few medical spots.

In the face of this reality, unpleasant as it is, you must have the best scores you can, no exceptions. Your basic chemistry and biology scores must be high, as should your humanities scores. You must strive to do better than the average in ALL things you do, particularly on the MCAT, because there are too many average folks out there. You need to stand out in some way. This may seem overwhelming, and it IS, for ALL of us, at times. The best advice I can give academically is to be the long-distance runner, an analogy familiar to many, I am certain. Life, particularly one involving long-term commitment to medicine, is not a sprint, as my father is wont to say. Study hard when it is time, but exercise, play, laugh, and take time out to retain your sense of sanity and appreciation of life during hard times, particularly those

weeks where you have 3 pre-medical exams and need to study for the MCAT. A balanced life will get you far, and there is no substitute that I have found yet at 28...maybe you will be the one, but until then, this is fairly sound advice. If the classes are uninteresting to you, that is something to seriously consider, because medicine IS a great deal of basic scientific concepts. However, your lack of interest might be from the teacher, the TA, the way in which material is presented, etc. If this is the case, do not fool yourself into letting this be an excuse for you to do poorly. No one on an interview panel/committee cares and you can not explain your numbers as they appear on paper. You must find a way to make the class interesting for yourself. Find one thing you are fascinated by, and focus on it, do some research or extra credit work on it and try to relate as much of the class or general material to it. You may come to find a real passion for your future career this way. Or challenge yourself to talk to outside professors if your own is poor or not helpful to you. Or see just how high you can score on exams, how well you can learn the material DESPITE dreading the class at times. All of this will help you not only in college, but in medical school as well and probably beyond.

The MCAT seemed much more intimidating to me whenever people spoke of it, than when I actually finally sat down to look at a sample test. If you are this way, then just go look at a sample test NOW, way ahead of time to convince yourself that is NOT the nightmare we all hear about....The thing about the MCAT you should know (and probably do by now) is that it is NOT a straightforward exam. That is to say that it is not attempting to simply test all that you have soaked up in all your premedical classes at school. It tests how well you can take THIS test, which is an amalgamation of deductive reasoning, quick recall and basic understanding of scientific principles, and the ability to go beyond what you know to apply principles of which you may only have a basic understanding. In order to do well on this exam, you need to do several things:

1. Know the information from all your classes well the FIRST TIME. Then later, you will only need to review, not cram, which WILL NOT WORK on the MCAT.
2. Learn the big picture: learn concepts, like acid-base balance or osmosis and how this can apply to a wide range of situations.
3. Look at the MCAT early to familiarize yourself with its format so that you will never be surprised or intimidated, merely familiar and as confident as possible.
4. Take as many practice tests as possible, from different companies, if possible. The more exposure you have to the types of questions asked, the types of answers that are correct, incorrect, etc, the better you will do. I did well on the MCAT without Kaplan, and it is not necessary to take this course and spend this money. However, you must be very committed and dedicated to reviewing and practicing on your own.
5. Don't shirk the writing portion. Make yourself write well and take this portion (and all portions) timed so that you are prepared and can do well under pressure. Have an English teacher or equivalent grade or judge your essay...you will think this is the easy section of the test, but it is not and is taken seriously. Don't blow it off.
6. Test day: ignore anyone who seems overly confident or intimidating. They are just better at covering up their nervousness. But try to stay calm and confident...as you are already familiar with this test: YOU KNOW HOW TO TAKE IT by the time it gets there....relax and attempt to let your mind/body do its thing and do it well.
7. Celebrate when you are done and try to get on with your life until you hear your scores.

One of the most important things in the application process is to make yourself unique and able to stand out against the crowd of people from places like Harvard, Stanford, etc. They are naturally going to get a good look because they come from very competitive schools and had to go through a very similar process to this one to get in to college. Also, they are more likely to play the oboe or excel in random things because the crowd they run with is this way. You need not be intimidated by these folks: remember, you are from Idaho and that stands out...we are still an oddball state and place to most and it will catch their eye IF and only if you have done some other things that make them notice you. You must be WELL-ROUNDED. You must have done and experienced a wide (and perhaps I will add wacky, unusual, off-the-beaten-track, etc, etc, etc) range of things. When Rolf says get a hobby...he means it. Nothing is more impressive than expertise in something most know little about. I had a woman at Harvard ask me to give her a 3 minute lecture on avalanche science (I was interested in this after being a ski patroller), and she was fascinated. A little of things like that will go a long way, but it must be legitimate. People on those committees, particularly those you interview with, will have a nose for bullshit...they have seen and heard it ALL...be genuine, and if you don't know your stuff or yourself, be careful, because they will find your flaws--they are looking to separate you, winnow you out. You must be able to sit with the best and brightest in the nation and hold your own...be confident and interested in your own life and what keeps you unique from everyone. Do not be afraid to explore a huge range of things before you find something that is meaningful to you. Only then will it ring true to you and everyone else. And of course it goes without saying that you MUST have some medical work experience--even if volunteer, and try to make this as equally unique as yourself and your hobbies.

When you finally get an interview, that's when a lot of people get nervous, but you must try NOT to be, as much as possible. If they are interviewing you, they are interested and this is really the best shot you have to show them your uniqueness, your good personality, etc. You have then MADE THE CUT --the second most important cut to being accepted, because you can't be accepted without the interview. You must take this seriously, but not get nervous OR overly confident. They are looking for all the good qualities in you: the ones that will make you a great physician and

scientist, so you must try to make these come through. Obviously it can be tough if the interviewer is poor--tries to make you defensive or talks about him/herself, or strays from relative topics. But this happens to EVERYONE in the process. Again, don't take it personally and consider it a challenge and witty game of intellect to get the conversation back to where it should be going. Don't be afraid to ask the interviewer questions, if it seems appropriate. Be candid and honest at all costs--do not try to please or placate the interviewer. There are tons of people doing that--it is not interesting and does not set you apart. Be honest and don't be afraid to take a moment to pause and answer thoughtfully, seriously. Your job is as much to find rapport and common ground with the interviewer as their job is do the same with you. They will usually only come away impressed or really notice you if something about the interview is positive and unique. If that occurs, then you have an even better chance to get in. Remember, they are looking at you as a future doctor/scientist, not a college premed student...they want to see maturity, candor, honesty, thoughtfulness, and only a little bit of natural nervousness. This is really your 1/2 hour to shine. Do it with grace.

## **RM, University of Osteopathic Medicine and Health Sciences, Des Moines, E99:**

Dear Future Physicians,

After having gone through the tedious process of applying to med school I would like to share some helpful advice. There are several characteristics that can be attributed to the vast majority of prospective medical students:

1. Competitive GPA
2. Above average MCAT scores
3. Medical experience
4. Great letters of recommendation

Because the majority of applicants (who are applying for the very seat you are applying for) have credentials that are similar to yours, you need to find a way to distinguish yourself from the others. I recommend that you volunteer in both medical and community settings (in addition to any paid positions you may hold) to demonstrate your community commitment. If you are eligible for work study, the Student Health Center has several positions open each year that can be worked around your schedule to gain valuable experience. In addition to medical experiences, I think it's essential to demonstrate community involvement. What's most important is that you find enjoyable, altruistic activities that will enhance your application and confirm your expectations of the medical field and serving the needs of others.

I highly recommend applying to both allopathic and osteopathic medical schools if you are serious about practicing medicine. After interviewing at both D.O. and M.D. schools, I found the osteopathic schools to be more compatible with the expectations I have from my medical education. If you do apply to both, it is imperative that you can answer the questions regarding your decision to apply to both D.O. and M.D. schools during the interview. And perhaps most importantly, if granted an interview you should allow your personality to show and demonstrate your capacity to become a competent, caring physician. I believe my ability to identify with my interviewers and convey my dedication to becoming a physician was an important factor in my acceptance. Best wishes for a bright future, RM.

## **CW, Uniformed Services University of the Health Sciences (USUHS), E00**

I just wanted to send you a quick hello, along w/ some advice for anyone thinking of attending USUHS or applying for Health Professions Scholarship Program (HPSP) scholarships.

I've managed through the Air Force's summer officer training program, have settled in to a new place here in Maryland, and am beginning to find a groove in terms of keeping pace w/ med school. You mentioned that putting some thoughts down for pre-med students would be helpful to you. In a word, I can not stress the MCAT enough. If I had it do over again, I would have probably taken a commercial MCAT study course, even though the price on those courses is steep. I think it's not as bad as the expense of 1 year of an unsuccessful application process.

Another word of advice is simply NOT to hurry to get to medical school. Thinking of the "big picture" is so incredibly difficult in your senior year of college when everyone is accosting you about 'what are you going to do when you graduate?', but try to realize that medicine is a long road, and there's no need to rush a long trip. The year I spent working with AmeriCorps/VISTA was absolutely one of the most rewarding experiences I have ever had. Even though it doesn't seem like much, taking a year off did wonders for me in a number of ways, especially in terms of thoroughly examining this career choice. I think students that go straight to med school are really missing out on a wonderful opportunity to grow as a person.

The issue I'd like to deal w/ most, however, is for students considering USUHS or the HPSP program.

First, please let any interested student know that I am available any time for questions about any of this.

About USUHS...although it probably goes w/out saying, USUHS IS a military school and even though it is an academic environment, the military environment should not be discounted. As an Air Force student, I was required to attend a rigorous month-long officer training course, which, on more than one occasion, really made me question whether it was all worth it or not. I can't speak for the other services, but for the AF, they have begun a reversal on the general laxness in the medical corps and are really pushing the non-line (non-combatants, like docs, lawyers, and chaplains)

toward training more similar to the line side (combatants). While I was in one of hopefully few classes that suffered through the "transition" period of being very lax to virtual boot camp (we were sleep deprived, gassed, yelled at, etc.), students absolutely need to realize that they will take a dual obligation, one to the military and one to medicine. And while some will put priority on one or the other, the reality, in my opinion, is that those obligations really need to be equally shared. If any students are interested in more specifics about the summer training program, please have them contact me. Please encourage them to ask questions and gain a firm knowledge of what they are getting in to. I can also direct students to more information on service-specific details if they're interested.

USUHS has positive and negative aspects, which students need to weigh strongly. Here are some aspects that I'm still adjusting to, that students may want to consider:

- wearing a uniform to class
- attending required AOfficer Professional Development@ 1 X per month
- having classes on Amilitary studies@ (optional)
- hanging out w/ prior service military folks
- thinking about the primary mission of the military (to kill people) and the primary mission of medicine (NOT to kill people)
- thinking about how the next 14+ years of my life are owned by the US Air Force (4 for school, 3+ for residency, 7 for payback)

Here are some things that I particularly appreciate:

- S excellent support services: USUHS is adamant about helping students in ANY way they need to, from academic to medical support (there is a fully staffed clinic ON campus)
- S pay: it's VERY nice getting paid to go to school
- S history course: one of the best lecturers I've ever had
- S human context course: though this is a military school, they try very hard to begin dealing early and intensively w/ real-life medical issues (not just basic science courses)
- S National Institutes of Health (NIH)/other resources: NIH is literally across the street. In terms of access to a vast array of information and resources, you can't go wrong. We're having a guest lecturer from NIH come here on Monday for a biochem class.
- S living near the capitol: in and around DC is a great place to live B when you're not studying, there's never a shortage of things to do. As a political science major, it's just an added bonus to be able to pick up the Washington Post for a quarter on any street corner.
- S family oriented: over half of my class is married and a good 35-45% have kids. USUHS has done phenomenally in terms of making this as family-friendly a place as possible.
- S interest groups/extracurricular activities: There is an extremely vast array of Ainterest groups@ or clubs here (e.g. Wilderness Medicine, Special Ops, religious based, almost any major speciality {Family Med., OB, Surgery, ER, Neurology, Internal}...), many of which are supported by university \$.
- S clinical opportunities: while there is no formal clinical opportunity in the first semester (I'm actually not sure when it officially begins), one of the clubs places students in 2 clinics for the underserved, which is something I'll be starting soon.
- S clinical rotations in Hawaii, Florida, California, Washington: for students who were attracted to the geographical range of WWAMI clinical rotations, this is very similar, only on a much wider scale (plus, it's all expense-paid)
- S mentorship: a new program that places students w/ doctors in specialties they may be interested in
- S optional class attendance (lab is mandatory): considering this is a mil. school, I thought the fact that they allow optional lecture attendance to accommodate for folks that learn best on their own is very cool.
- S free books, bone set (loaned), microscope and slide (loaned)

I don't know if any of this will help, but I wanted prospective students to really have a sense that this is a unique school, in several good, bad, and indifferent ways and that those characteristics should not be overlooked when applying to (and perhaps deciding to attend) this school. Again, I am happy to answer any questions you or other students may have.

Also, based on my experience, if students are invited to interview at this school, there are two things to consider: 1) An interview here is VERY VERY good news and 2) the interviews here are very relaxed; don't stress for this one, do that in Seattle :). Do, however, have an extremely good grasp of why you want to be a military physician.

Speaking of skipping classes, I just skipped one to write this e-mail, so I had better be going. I miss Moscow, but am enjoying myself here.

**DK**, University of Michigan School of Medicine (as AK resident), E01

Admissions advice:

- APPLY EARLY. During my second year of applying, I had very positive experiences at one school and was placed on the alternate list. I applied again the next year and expected that with my many improvements I would be well received. I did not receive an invitation to interview and I wrote the dean of admissions asking for an explanation. He informed me I was not given an interview because I had applied so late in the admissions process. The majority of schools will have already filled most of their positions towards the deadline for the secondary applications. Need some motivation? Just think about the thousands of talented individuals submitting their applications early and being offered positions during the first few weeks of the admissions process.

-I believe maintaining contact with medical schools throughout the admissions process is very important –in moderation. I had heard nothing from the University of Michigan for several weeks and I decided to call the admissions office. They responded by asking me if I was still interested in the University of Michigan. I was perplexed by their response as I thought they were the ones who were supposed to contact me for an interview. The following day I was called by the office and offered an interview. Had I been afraid of bothering the office I would not have been accepted at Michigan. Calls are often documented and let the school know you are still interested.

-It is not uncommon for applicants to send letters to their interviewers following interviews thanking them for their time and presenting any further questions or impressions. I did not feel comfortable writing such letters to all of my interviewers but I did maintain contact with those who gave me their business cards and seemed genuinely interested in fielding any further questions. This further dialog is beneficial and it's great to be able to comfortably check in with a faculty member at a later date if placed on an alternate list.

-Einstein's theory of relativity definitely applies to alternate lists. If a school doesn't provide a ranking on the list chances are one's position can be directly influenced by their actions in the following months. Being on the list is not entirely passive. The University of Michigan, for example, logs every call made and a student checking on the status of the list (with moderation) may improve their ranking. They also allow for students to send a letter of intent expressing a guarantee to go to Michigan if accepted from the list. Sending such a letter to one's first choice school can improve their standing on the list. It is also a very good idea to inform the admissions committee of any new developments that could bolster an applicant's profile. If a good connection was made with a particular interviewer this would be a good time to communicate continued interest and ask for advice on how to improve one's standing.

-If an applicant is unsuccessful on their first attempt to apply to medical school I believe it is extremely important that further attempts are marked by solid improvements. These improvements might include retaking the MCAT, obtaining new letters of recommendation and gaining more medical experience. Subsequent applications should be sent in at the earliest date possible. I feel it is a much better approach to try to aggressively improve one's profile rather than to try to slide by the next year with minor improvements. After my first attempt to enter medical school failed, I made small improvements on my application because my MCAT scores and overall profile were good. I was placed on several alternate lists and did not matriculate. Faced with a third year of applying to medical schools, I decided to retake the MCAT and improved my scores dramatically. I also gained valuable medical experience working at my local hospital. My overall profile was excellent on my third attempt; however, many schools on my list did not consider me, perhaps, because I was now applying for the third time. I applied to 16 schools and received interviews from the top schools on my list. The remainder of the schools; however, declined to offer me interviews. I would strongly recommend making every possible improvement on the second attempt in order to prevent becoming "stale".

-Above all don't give up! Applying to medical schools multiple times can feel like pounding one's head against the proverbial brick wall. While engaged in this type of activity it's a good idea to take a step back, survey the situation and determine which will give first! If determination and perseverance are accompanied by realistic progress towards one's goal, by all means, pound away! I have met some wonderful doctors who entered medical school on their third attempt.

-Take advantage of online resources. When preparing for interviews take the time to peruse the medical school websites. Make sure to have a specific and unique set of questions ready for each interview. [www.interviewfeedback.com](http://www.interviewfeedback.com) is a great resource listing applicants' interview experiences for the majority of medical schools. [www.studentdoctor.net](http://www.studentdoctor.net) is another site with forums addressing virtually every medical school topic (be

prepared for some arrogant and discouraging posts mixed in with a great deal of valuable information). [www.nytimes.com](http://www.nytimes.com) provides great coverage of the medical field. <http://www.nejm.com/> provides searchable free abstracts, and full-length commentaries. The World Health Organization has placed the "World Health Report 2000" online at the following address: <http://www.who.int/whr/2000/en/report.htm> .

### **DJR, Dartmouth Medical School. E01**

I believe that it is possible to have a "magic" formula to get into Medical School, but I believe that is the wrong way to get there. Anyone could build up a false pretense that could *wow* an admissions committee; the result however is a disservice to the institution, yourself, other applicants, and future patients. I know that it can be a very long process. Often, though, we become so focussed on getting to the next step, that we do not realize/appreciate how important making a match of program-to-student, based on your true intentions and beliefs can be. You simply want to get in. But this is where a paradox sets in: what are the things they want in a student, and what is it that you can do/say to convince them that you are the choice for them. You believe you will be just about an absolute perfect fit for a program, and they need to see that. Right?

Everyone that gets into medical school is sure to advise, "Just be yourself." I know I felt this was a pretty scary concept, back at that stage in the process; it probably is for most people. Nobody wants to rely on themselves, they can't really believe that is enough, either that or they want the "edge" that will put them over the top. Here is what you most likely already know; this is just to let you know it can work.

- Sell yourself; let them be able to make a judgment on the qualities that you like about yourself and believe to be important.
- Do what you believe in; don't become false, for yourself or them.
- Spend practical time with an area of personal interest, as close to doing the job you want to do as you can get. If you are really going to make a career out of medicine, you should know what you are in for.
- Think through who you are, don't get beat because you didn't know how to convey what you believe in.
- If you get an interview, no one is in a better position for the next seat than you. As I went around for interviews, I realized that my fellow applicants, themselves, would quite likely do a pretty decent job of convincing the admissions committee of which candidates should be ruled out early. All I had to do was not join that group.
- Decide to not be a target. They asked you to see them so that they could learn about you; treat the situation as that, not as if you are the quarry in a hunt.
- The hardest time to keep in mind the last may be if you interview with UW; they are actually a very nice group if you can see behind their mask. They want you to work for it and to still be able to come through a winner. Being a physician will be much more challenging than these people are.
- Don't try to make it where you shouldn't be. If you believe you should be a physician, you should be able to find a place, a program, that is going to be suited to you. If you can find where you belong, then you have just found why. A good fit does not happen by accident, so be ready to explain how and why you *honestly* believe that you will be so well suited for a particular program.

Good luck to all of you.

### **KK, Arizona College of Osteopathic Medicine of Midwestern University, E03**

You asked me to provide input and this is what I would offer other pre-meds: It is never too late if you want it bad enough. The schools are not looking for a specific type of student. The schools are looking for trends in performance and not just the final numbers. They value experience and not just in the medical field. I have 8 years experience as a full-time police officer and each school was impressed with that. If a student is a fireman, policeman, or some other profession that experience is good as long as they excel in what they do and work very hard to grow as a person. Maturity is a very big factor that is important to schools. Get out and see what the world is like to live in and spend time in a Dr.'s office and see what they do. I don't mean just a couple of hours in an office once in your life either. I would spend 8 hours a day twice a week for an entire summer to see what it is really like. This shows them that you have done your homework and know what you are in for. With a limited exposure students come to school and really don't know what it is to be a physician. The experience you gain seeing the day in and day out routine of an office can be invaluable. Last of all, work very hard in you studies and learn as much as you can. If you have a minor hiccup in performance in one semester don't let that be the end of you. Like I said before they want to see trends and most schools realize that certain factors present themselves in life and must be overcome. If you have a sub-perfect semester live with it and then come back in the following semester and do

very well and continue to excel in your studies and you will be able to explain what the problem was that specific semester and how you overcame the problem and learned from your experience and won't repeat the same mistake. One last piece of advice, be ready when you start medical school. It is not like undergraduate work. The curriculum is extremely intense and falling behind is not an option. In medical school, time is your most valuable commodity. You must learn time management and use your time very efficiently. You will soon find that there is not enough time in the day to casually learn the information they require you to learn. I am just stressing the fact that staying up with current material is very important because if you wait until the last minute and think that cramming is an option well in medical school it more often leads to failure. So just start refining your skills and see how much spare time you can get out of your undergraduate education because in medical school you will be able to put this time to good use studying because that is all that you will do for a while. One more thing, marriage and a family is not a problem many of my classmate are also married and have a family and we all seem to be doing fine. It is just very important that you and your partner are both ready for the venture ahead and they need to know how busy you will be but let them you know that you will make time for them when you can. It is just a balancing act you must work out. Good luck and work hard and you will get there.

## NC, Western University of Health Sciences / College of Osteopathic Medicine of the Pacific, E09

- **Contact your pre-medical advisor**

Your pre-medical advisor is an excellent resource and should be sought after as soon as you enroll in college. Remember, they are the ones that have dealt with successful and unsuccessful applicants and can, therefore, provide invaluable information that can be used to your advantage. In addition, they can give you information regarding required pre-med classes, medical school requirements, a timeline of your application, and can also keep any letters of recommendation you receive on file.

- **Complete required pre-medical courses**

In addition to majoring in something you are interested in, be sure to complete the required pre-med courses as well. Doing well in these classes is essential. Taking these classes will prepare you for the MCAT. In addition, receiving a stellar cumulative and science GPA can sometimes compensate for a lower MCAT. A high GPA is an indicator to the admissions committee that you are a focused and dedicated student.

Establish a rapport with your professors by visiting them during their office hours. Inform them of your desire to pursue medicine. If you feel like you have done well in class and have a good relationship with your professor, ask them if they feel like they are comfortable enough to write you a strong letter of recommendation for medical school. If they aren't comfortable, that is perfectly fine. It is far better to have no letter of recommendation from a certain professor than a subpar letter of recommendation. It is important to ask your professor while you are still fresh in their mind and not two years after you have a class with them. If you feel more comfortable waiting a while after you have completed a course under their instruction, keep in close contact with them during that period to ensure that you will be fresh in their mind when they write a letter of recommendation for you.

- **Be involved with extracurricular activities**

Get involved with activities such as a job, clubs, volunteer work, job shadowing, leadership, and research. When it comes to extracurricular activities, quality is always better than quantity. Make the most out of each of these experiences and make an effort to be involved for a long period of time. For each of these experiences, note the amount of time that you were involved. "500 hours of community service at....." will look much better than "Community service at..." on your application. Learn something from each one of these experiences. It may be possible that you will want to include one of these experiences in your personal statement.

Job shadowing is an absolute must. If possible, try to job shadow a variety of physicians, both D.O. and M.D. Keep notes of each experience. What did you like about your experience? What did you dislike? Is this something you can see yourself doing for the rest of your life? Also, it would be wise to create a questionnaire to have each physician fill out regarding their career choice, social life, advice they have for you, etc. Painting a clear picture of what being a physician is really like will benefit you greatly throughout your application process.

Research is not required by most medical schools, but it can be a great learning experience nonetheless. If you are having trouble deciding where and what to do your research on, contact one of your professors and ask them if they are planning a research project that you could help out with. Get as involved with the research as you can, ask questions, and be sure you understand the research front and back. This is very important because it is very likely that the interview committee will ask you questions regarding your experience.

If you plan on working during your undergraduate years, it would help to try and get a job where you can receive patient contact. Find out if there are any EMT or CNA courses that you can enroll in or if you can work in a doctor's office.

Remember to make yourself shine during each one of these experiences. If you decide that you want to ask one of your supervisors or shadowing physicians for a letter of recommendation, be sure to phrase it in a way that will ensure you the best letter of recommendation possible. For example, instead of asking, "Can you please write me a letter of recommendation?" say something like, "I'm very interested in applying to medical school. Do you feel confident that you can write me a strong letter of recommendation?". Additionally, it may help to provide each letter writer with a resume about yourself that includes any notable accomplishments, hardships that you have overcome, experiences that have formed your identity, etc.

- **Medical College Admissions Test (MCAT)**

This will probably be one of the most stressful exams you will take during your undergraduate years. Plan on taking this test a year before you apply for medical school. If possible, schedule the exam on a date that you feel would be the most convenient for you (i.e. no other college exams to study for). If money is not a factor, look into an MCAT prep course. If it is, look into buying some MCAT study guides such as Kaplan or Exam Krackers. Study well in advance of your scheduled MCAT. Take as many practice tests as possible before the real exam. These can be found at [www.amcas.org](http://www.amcas.org). If you consistently score low on a section on the MCAT, get as much help as possible to help bring the score up. For example, if you are doing poorly on the verbal reasoning section, purchase more practice tests for verbal reasoning until you feel confident with that section. Don't be too hard on yourself if you don't do as well as you would like on a practice exam. Learn from your mistakes and try to better yourself.

- **Personal Statement**

Begin brainstorming your personal statement at least three months prior to submitting your application. You may have to write and re-write your personal statement several times. Do not underestimate the importance of the personal statement. After you feel like you have a strong personal statement, have several people read over it, including your pre-med advisor, English professor, etc. It is extremely important that you use proper grammar and spelling. The personal statement is a chance to tell the admissions committee why you want to pursue medicine. It is vital that you back your reasons with specific experiences you have encountered.

- **Choose schools to apply to**

After you receive your MCAT scores, ask your pre-med advisor if he/she has a copy of the Medical School Admission Requirements (MSAR) and research each school to find out which ones you feel fit you the best based off of your MCAT, GPA, preferred location, private or public school, etc. Keep in mind that most state supported schools only accept a few out of state residents. Unless you have ties to the state, do not waste your money applying to these schools. However, do not limit yourself on schools. Apply broadly and shoot to apply to 12-20 schools. To apply to M.D. schools, go to [www.amcas.org](http://www.amcas.org). For D.O. schools, go to [www.aacom.org](http://www.aacom.org). The earlier you have your application in, the better. A lot of schools are on a rolling admissions basis, which means that they interview as they receive applications.

- **Interview**

If your pre-med advisor offers mock interviews, take advantage of it. You can learn a lot about yourself in these mock interviews. If you receive several interviews, schedule your top ranked schools after your lowest ranked schools. By interviewing at your lowest ranked school first, you'll be getting additional interview

experience that will be handy before you interview with your higher ranked schools. However, you do not want to schedule your top choice schools too late in the cycle. Prior to your interviews, it would be wise to thoroughly research the school. Additionally, you can read other students' interview feedbacks at all medical schools at [www.studentdoctor.net](http://www.studentdoctor.net). If you receive an interview invitation, congratulations! This means that a school is seriously considering you. However, an interview can make it or break it. Be prepared!

After you interview with a school, send out thank you letters within a week. If you feel like there is any additional information, such as a job experience or personal experience, that will help your application at a school after you interviewed, send them an update. If at first you don't succeed, try again! Good luck!

**Appendix XII.** Careers covered in the book, *Allied Health Education Directory* (American Medical Association, ISBN 0-89970-601-0, published annually).

For each of the careers listed below, this book gives a historical overview of the field, occupational description, job description, employment characteristics, general description of the education programs (e.g., length, prerequisites, and curriculum), professional associations, licensure, and a list of all current programs in this country. This list includes address, program director & phone number, class size, beginning date and duration of the program, resident and non-resident tuition, degree awarded, and next accreditation review date.

Anesthesiologist's Assistant	Nuclear Medicine Technologist
Art Therapist	Occupational Therapy
Athletic Trainer	Ophthalmic Dispensing Optician
Audiologist/ Speech-Language Pathologist	Ophthalmic Laboratory Technician
Blood Bank Technology Specialist	Ophthalmic Medical Technician
Cardiovascular Technologist	Orthoptist
Clinical Laboratory Scientist/Medical Technologist	Orthotist/Prosthetist
Counseling-Related Occupations	Pathologists' Assistant
Cytotechnologist	Perfusionist
Dental Assistant	Pharmacy Technician
Dental Hygienist	Physical Therapist
Dental Laboratory Technician	Physician Assistant
Diagnostic Medical Sonographer	Radiologic Technology
Dietetician/Nutritionist	Rehabilitation Counselor
Electroneurodiagnostic Technologist	Respiratory Therapy
Emergency Medical Technician/Paramedic	Surgical Assistant
Health Information Management	Surgical Technologist
Kinesiotherapist	Therapeutic Recreation Specialist
Massage Therapist	
Medical Assistant	
Medical Illustrator	
Music Therapist	

One of the best sources for information on the future outlook for these career options is the Director of Human Resources/Personnel Director at your local hospital. This person is acutely aware of trends in medicine and hospital management and can tell you what's hot and what's not. BEFORE you invest more time in your career, determine whether the career that interests you is in the process of being phased out or whether there will be an increased future need.

Additionally, or alternatively, take a close look at [www.ExploreHealthCareers.org](http://www.ExploreHealthCareers.org)

**Appendix XIII.** Concepts in Biochemistry and Molecular Biology that the University of Washington School of Medicine requires that you know before you enroll in their program (as of Sept 1999). (Your knowledge should be based on formal course work in Biochemistry or Molecular Biology and not based on self-study.)

**Molecular Biology:**

- \* Know the chemical nature of DNA, RNA, genes and in general how genes are organized into chromosomes.
- \* Understand the nature of eukaryotic DNA replication.
- \* Be familiar with transcription of genes and intron splicing.
- \* Have an overview of the mechanism of protein synthesis.
- \* Understand the principles of recombinant DNA technology (e.g., restriction endonucleases, PCR, southern blots, transformation).

**Proteins and Enzymes:**

- \* Understand pH, pKa, and buffers.
- \* Understand how proteins fold, and how ligand binding and enzymatic activity depend upon three-dimensional folding.
- \* Understand principles of enzyme kinetics ( $K_m$ ,  $V_{max}$ , competitive inhibition, allostery, and regulation by phosphorylation).
- \* Understand principles of energetics (e.g., free energy change, equilibrium constants, concentration gradients, and redox potentials).

**Metabolism:**

- \* Understand glycolysis, the TCA cycle, and how ATP is produced by oxidative phosphorylation.
- \* Be familiar with how fatty acids are oxidized and synthesized.
- \* Be familiar with patterns of amino acid catabolism and the urea cycle.
- \* Understand the nature of phospholipids, lipid bilayers and membranes.
- \* Have an overview of nucleotide biosynthesis.