As institutions of higher education in the United States increasingly seek to attract a geographically diverse student population, the number of international students has begun to increase not only at the historically research-oriented universities, but also at small, liberal arts colleges nationwide. Indeed, many undergraduate admissions offices now use a “need-blind” financial aid policy, which means that foreign students from all economic levels can now consider an undergraduate education in the United States. Based on my experiences with students at Yale and the University of Chicago, along with anecdotal information gleaned from colleagues nationwide, the apparent result of the increased attention on an internationally diverse entering class and on a “need-blind” admission policy is that many international students arrive at our institutions believing that a baccalaureate degree from a U.S. college or university guarantees that they will be able to pursue an advanced degree program, including medicine, in this country.

Premedical advisors are often faced with the unenviable task of informing international students that not only is it extremely difficult for those who are not citizens or permanent residents of the U.S. to obtain admission to American medical schools, but also that financial aid for such study is extremely difficult, if not impossible, to secure. Thus, it is imperative that pre-medical advisors work closely with the undergraduate admissions officers at their institutions to draft a statement that succinctly and clearly states these facts. At the University of Chicago, the Director of the pre-medical program conducts a yearly training session with international admissions counselors to go over the challenges present in the admission process to medical school for international students so that they can be as straight-forward as possible in their recruitment of international students.

Barriers to Acceptance
For those international students who still choose to apply for admission to U.S. medical schools there are two major issues they must confront: the lack of funding for foreign students and the small number of American medical schools that will consider applications from foreign students. Though undergraduate institutions are able to offer scholarships to international students in need, there are very few scholarships available for medical school education. The majority of American medical students finance their education through U.S. government-sponsored loans, which are available only to citizens or permanent residents of this country. Thus, many of the medical schools that accept applications from international students require that each such admitted student places in escrow the equivalent of one to four years’ tuition and fees (~US$45,000-US$250,000.) Unless an international student’s family can supply the necessary funds, depositing this amount of money in an escrow account is a nearly impossible task. However, there are some viable alternatives to securing the necessary funds, which will be discussed later in this article.

Provided an applicant is able to secure independent funding, another major hurdle facing international students is the relatively small number of medical schools that will accept applications. Using the Tenth Edition of the *Premedical Advisor’s Reference Manual*, it is clear that only 55 of the 135 U.S. medical schools accept applications from non-U.S. citizens/permanent residents and a handful of those schools state that they have not accepted an international student in the past 3-5 years. Moreover, according to the AAMC’s FACTS – Applicants to U.S. Medical Schools by State of Legal Residence 2002-2012 (https://www.aamc.org/download/321460/data/2012factstable3.pdf) of 1,378 international applicants to U.S. medical schools in 2012 only 183 actually matriculated. (This number becomes even more sobering when one considers that in 2012, 19,517 new students matriculated in
U.S. medical schools. Additionally, the vast majority of institutions admitting international students are private, and these schools typically have higher tuition and fees than state-supported medical schools, which may cause an admitted student to confront once again the issue of funding.

Alternate Funding Options to Consider
Although the above information paints a somewhat dim, albeit accurate, picture, there are some options for international students to consider when addressing the issue of funding medical school tuition and fees. One obvious option is institutionally supported (non-U.S. government money) MD/PhD programs that are frequently as well funded as Medical Scientist Training Program positions (www.nigms.nih.gov/funding/mstp.html), which are available only to U.S. citizens or permanent residents. However, these programs are highly competitive and are only an option for international students who have completed a significant amount of research and who are academically very strong applicants. When working with these individuals, advisors are encouraged to discuss in-depth the following questions, among others:

- Do you really want the MD/PhD in order to pursue your career goals, or is the dual degree primarily being used as a source of funding to attend medical school?
- Are you prepared for the type of educational experience that an MD/PhD program demands?
- Do you know the typical career path for which an MD/PhD program generally prepares you?

While an applicant without genuine interest in an MD/PhD program may attain excellent grades and the research experience required to be competitive in the admission process, if s/he is not pursuing the combined degree for the right reasons his/her interviewers will immediately recognize the lack of appropriate motivation and will be reluctant to accept the applicant. In all likelihood, the candidate will be passed over.

Another funding option that international applicants may wish to consider is securing loans from a private bank. Interest rates on these loans vary greatly, and the student must secure an American citizen or permanent resident as a co-signor. The following websites provide additional information on this option and can be used as a starting point for a more detailed discussion:

www.internationalstudentloan.com/intl_student/
http://www.ief.org/international-student-loans

International students should also be encouraged to seek information about loans that may be available from their home government. Some countries (especially lesser developed nations) provide financial support for their citizens to receive a medical education abroad. The student is normally then required to return to the home country to practice medicine for an established period of time to “repay” the loan.

International students may also wish to consider returning to their home country to pursue a medical education, but for those who may be unable to do so (more to follow on this topic) they might explore non-U.S. based medical schools. Among others, schools such as St. George’s University in Grenada and Flinders University in Australia accept applications from foreign students who have received their baccalaureate degrees from an American college or university. However, it is important to note that the issue of funding may again present a problem. These institutions may offer some scholarship funding, but if an international student still has financial need, s/he may again need an American co-signor to borrow the remaining funds from a private bank.

Canadian Students
It is important to note that Canadian students do not always face the same challenges as other international applicants do. First, the educational system in Canada is very similar to that of the
United States, and admissions officers are therefore more familiar with that educational system. Second, there is also a long history of Canadians receiving both their undergraduate and medical educations in the United States. However, the greatest advantage that Canadians have over other international applicants is that they are better able to manage the financing of their medical school education. The Canadian government provides its citizens with CanHELP loans, which can be used for a medical school education in the United States. These loans require that the applicant have a satisfactory credit history and be a citizen of Canada. Interestingly, non-Canadian citizens are also able to apply for CanHELP loans provided they have a Canadian co-signor. Students may apply for up to the cost of education (including tuition, fees, room and board) less other financial aid and/or loans with a creditworthy co-signor. The minimum loan amount is US$ 1,000 per academic year and the maximum is the cost of education as determined by the school, whichever amount is lower. Medical students may borrow up to US $25,000 each year on their own signature. More information about CanHELP loans can be obtained at http://www.internationalstudentloan.com/canadian_student/info.php. Canadians also find that it is much easier to secure loans from a private U.S. bank if necessary.

The obvious question to follow, then, is: Do U.S. medical schools view Canadian applicants in the same way as other international applicants or is special consideration given to an international student who is Canadian? The answer varies with each school. In some cases there seems to be no distinction, with all non-U.S. citizen applicants being viewed as foreign applicants. In other instances Canadian students have been admitted to medical schools that state they do not accept applications from foreign students. Indeed, there were nine U.S. Medical Schools which clearly stated that although they do not accept “international” students, Canadian students were eligible for admission. For Canadian applicants then admission to a U.S. medical school does not seem to depend nearly as much on the financial status of the candidate.

**Students Returning to Their Home Country**

International students may also wish to consider returning to their home country to pursue their medical education. Due to the great variety of educational systems that exist, it is impossible to apply one uniform rule to the likelihood of a student being able to return to his/her home country for a medical education. In general, in countries where a student would typically pursue a post-secondary educational scheme comparable to a U.S. baccalaureate program prior to entering a professional degree program, an applicant will find greater ease in transitioning back to his/her country for medical school. However, in those countries where it is common practice for a student to enter a professional education program following secondary school education, it will be much more challenging, if not impossible, for a graduate of a U.S. baccalaureate program to enter or to rejoin a medical curriculum in the home country. A student who is considering returning to his/her home country to pursue a medical education should contact the educational attaché at the consulate of their country to discuss his/her particular situation.

Here again it is important to separate Canadian students from the larger pool of international applicants, for Canadians do have the option of returning to their country for their medical education following completion of a bachelor’s degree in the United States. Indeed, it is quite common for Canadian students to apply to both U.S. and Canadian medical schools simultaneously. However, there are some differences in the admission processes. It has been our experience over the years that Canadian medical schools in general place a greater emphasis on the applicant’s GPA. While U.S. medical schools certainly consider strongly a student’s academic achievement in the admission process, they also tend to place significant importance on the non-academic components of the application, including research, clinical opportunities, extracurricular activities, and volunteer experiences. These components appear not to have as much influence in the Canadian admission process.
It is also important to note that similar to our state-supported medical schools that give preference to in-state residents, most Canadian medical schools also have a strong preference for in-province residents. Therefore, a Canadian applicant may actually have a greater likelihood of gaining admission to a private U.S. medical school than to an out-of-province medical school in Canada. The AAMC’s Medical School Admission Requirements publication includes a two-page description for each Canadian medical school and is an excellent resource for students. In addition, the Canadian Medical Colleges website (http://www.afmc.ca/index-e.php) is a comprehensive resource concerning admission to and statistics about those schools. And as a note to advisors who may not be aware of it, the Tenth Edition of the Premedical Advisor's Reference Manual also contains very helpful information about Canadian medical schools.

Undocumented Students
Thus far this article has focused on international students currently studying within the United States. The presumption has been that the students are currently visa holders with citizenship in another country, who are pursuing their studies with legal documentation and authority. We have not touched on the issues surrounding undocumented students. While in some cases undocumented students may be international, in many cases undocumented students may have lived in the United States for the vast majority of their lives and their adviser may or may not be aware that the student does not have documented residence in the United States. The challenges and barriers surrounding undocumented students are an article onto themselves, and is a topic well presented in a recent article in The Advisor (Agorham and Cuffney, 2012). One of the primary barriers to undocumented students is that, even if one could afford the expenses of medical school without benefit of financial aid, gaining a residency placement or state medical licensure was not possible. Therefore, the majority of medical schools have not been comfortable accepting a student who would be unable to practice medicine at the conclusion of medical school. The provisions of the Deferred Action for Childhood Arrivals (DACA) act has now provided a pathway for some undocumented students to gain work authorization privileges, which should allow for undocumented students receiving a medical education within the United States to gain licensure.

Loyola University Chicago Stritch School of Medicine has now created a policy welcoming DACA-eligible students to apply into their medical school. The full text of this policy can be found at: http://www.stritch.luc.edu/daca. Whether additional medical schools will follow suit with similar policies remains to be seen.

Some Concluding Thoughts
It is important for premedical advisors to understand the issues facing their international students. In some instances, these students may never have been told at the time of their acceptance to a U.S. bachelor’s program about the challenges they would encounter if they decided to apply for admission to medical school. Indeed, these students may be somewhat stunned to learn the statistics regarding the admission of international applicants to U.S. medical schools. Therefore, it is important for premedical advisors to make contact with international students as early as possible in their academic careers to begin a discussion about the challenges they will face and the options they might consider. If possible, advisors should contact their registrar’s office, office of international education, or undergraduate admissions office, whichever is appropriate on their campus, to obtain a list of all international students and subsequently to contact these students by email or other appropriate avenue of communication. With thorough and careful planning early in the academic career and with great attention paid to grades, research, and volunteer and extracurricular activities, well-prepared international applicants can gain admission to U.S. medical schools. But realistically international students must be far superior to their U.S. peers if they hope to secure any type of financial support from a medical school. Finally, for those international applicants who will be highly unlikely to secure a seat in a U.S. medical school it is incumbent upon premedical advisors to help them prepare alternative career plans.
References

1 This comment is a summary statement based upon the following articles:

This article was originally written with the invaluable support and guidance of Mr. Edward Miller, the Director of the Health Professions Advisory Program at Yale University for over 20 years prior to his retirement in 2008. Ms. Krapec was the Assistant Director of the Health Professions Advisory Program at Yale University from 2001-2004 and is currently the Program Director for the UChicago Careers in Health Professions Program.