

## **A Conversation about Pre Health Advising Transcript**

Spring 2022 Family Webinar Series

February 9, 2022

**Renaldo Luna Gacad-** Hi, everybody. Give us a few more moments to make sure that all family members have been able to log in, and then we'll get started momentarily. Hi folks, thank you for joining us today. Please give us a few more moments to make sure that all families have been able to log in to our Zoom call, and we'll get started in a few more moments. Hello everybody. My name is Renaldo Luna Gacad, and I want to welcome you to the first webinar of the 2022 Spring Family Webinar Series. I am the Assistant Director in the First Year Center, and tonight I am joined by my colleague, Carolyn Herman, Associate Dean of the College of Arts and Sciences. We are so excited that you've chosen to join us for tonight's conversation about pre-health advising. Some information before we get started, first, we wanna make sure you know how to submit questions during this webinar. You'll notice that we've given you the ability to ask questions via the Q&A feature at the bottom of the screen. Our professional staff within the First Year Center are helping to field these questions. To make sure you know how to use the Q&A feature, please share what year in school your student is. This will also help us and Dean Herman tailor the information for tonight's audience. While you do that, make sure to keep an eye on the chat feature, where we will be sharing links and email addresses that are mentioned during the duration of the webinar. Finally, this webinar is being recorded live. Next week, it will be uploaded to the families.wsutl.edu website. In a moment, we'll hear from our panelist about pre-health advising. If something she says sparks a question, don't forget to send it to us using the Q&A feature. In terms of the families that are joining us tonight, it looks like we have students, parents, and family members whose students are primarily in their first and second years, but we have a mix of all years represented here today. So now, since I know you all want to hear more about pre-health advising, I will turn it over to Carolyn to introduce herself before we begin our question and answers.

**Carolyn Herman-** Hi, thanks. Thanks so much to the families for taking this time to be here, and I'm excited to get a chance to talk with you. Pre-health advising at Wash U., probably the most important thing for families and students to know about how we do things, is that we support everybody. We believe that every Washington University student has the capacity to achieve the goals that they set for themselves, and so we really believe that whether your student is planning on medical school or dental school or physical therapy or whatever their future path may be, that they will get there, and it is a question of when, not if, and that if their discernment process has been good, if they have really, you know, carefully explored whether this is really the right career fit for them and they're very certain about their decision, that the rest of it is just strategy. The rest of it is just figuring out what do I do at what time in order to reach my goal? And we believe everyone will get there. So I certainly am happy to take, you know, family questions about more specific things. A general outline is that we don't assign first year students pre-health advisors. They already have a lot going on just adjusting to their new academic home and getting to know their four year advisor, and we don't wanna interrupt either of those things by giving them another chore. So we assign advisors to sophomore students, and that'll happen for the families of sophomores toward the end of this month. So

your student will be getting more information next week about some meetings to attend or a recording to watch if they really can't be at the meeting, although we would love for them to actually come in person, because I know myself, sometimes it's hard to go back and watch it, make time to really go back and watch recording. So we'd love to see them in person if they're sophomores, and then we're gonna encourage them to create an account in our new platform that we have for pre-health advising, and then they'll get an advisor assignment. So first year students do not need to meet with an, a pre-health advisor, but if they want to, we have a list of advisors in the chat there with how to contact them and when they're available. So any first year student, if they've got very specific questions or if they just, you know, are feeling insecure about what they're doing and wanna make sure they're, you know, kind of proceeding correctly, more than welcome to my walk-in hours or to meet with anybody on my team. And second year student sophomores will be getting advising assignments in just a couple of weeks, and they should start meeting at least once with their pre-health advisor, probably this semester.

**Renaldo Luna Gacad** - Carolyn, thank you so much for being here to answer our family members' questions. I do have a question that I know many family members may be wondering off the bat. Does Wash U. offer any support for preparing for some of those standardized tests like the MCAT?

**Carolyn Herman** - Yes, we actually do have an in-house course that we run through the Learning Center. I'm gonna call it a course, but it is not for credit. It's just an optional, it's, so it's more like an extracurricular. There is a fee attach to that, but it is far less expensive than a lot of the comparable, commercially available prep courses. And I would also say that for families that are, you know, put off by the price tag, your students should definitely be talking to the Student Success Center. We do not want anyone skimping on prep because it's not affordable for them, and students, this is one area where Student Financial Services is actually not allowed to help students and families. So the federal financial aid guidelines say that financial aid can only apply to things directly related to the undergraduate experience. So anything that is preparing for graduate school or preparing for professional school or preparing for a job search has to come from someplace else, which is why we have the Student Success Fund for families that would need aid, you know, for all of those endeavors and student Financial Services Services can't help. So please don't feel like there's a financial barrier to your student preparing effectively.

**Renaldo Luna Gacad** - Thank you so much. So family members, we're going to move on to our audience submitted questions, both the pre-submits and the live submits. As a reminder, please ask your question via the Q&A feature found at the bottom of the screen. So for this first question, will students be better prepared for a career in healthcare if they choose a major focus in the sciences compared to outside of the natural sciences?

**Carolyn Herman** - That's a great question, and we have strong statistical evidence that there is no major that makes it more likely for a student to be admitted, and no major that makes it less likely for a student to be admitted. So I have students in medical school, for example, you know, who majored in dance, and obviously they have to take the pre-med requirements that are

gonna be tested on the MCAT and that schools require as a foundation for their graduate coursework, but medical schools value having a diverse array of perspectives in their medical school classes, and that includes differences in kind of academic background and the sort of lenses and ways of thinking that people bring to problems. So students should really study what they love. They, medical schools certainly wanna see intellectual curiosity and commitment to academics, and that is much easier to display in something where you're genuinely looking forward to going to your classes. So I really, really strongly encourage families to help their children discern what do they love studying and pursue that, and then yes, there is a basket of courses that also have to be completed, but those will fit alongside absolutely any major in arts and sciences.

**Renaldo Luna Gacad** - Carolyn, we have a lot of questions that are asking about some of the experiential pieces such as shadowing, et cetera. So I have a couple of questions in regards to that. So, many students were unable to complete traditional internships, in person shadowing, et cetera, due to the pandemic. Will medical schools understand the challenges faced by students as a result of COVID-19? What advice do you have in regards to this for our students?

**Carolyn Herman** - Yeah, this is the hardest thing, because I'll just say, I have a kid this age, right, in fact, I have two of them. I have one who just graduated from college last spring, and I have a current junior at Wash U. So like, I am, you know, I am here with you, I am empathetic. I know how much the pandemic has cost young people in particular. Like, it has been hard on all of us, there's no doubt about it, but young people particular, it has had an outsized impact on. I know that, and I'm sorry. So much has really been stolen from our children, and I really am sorry about that. The fact remains that medical schools want to see evidence and not theories that applicants understand what they're getting themselves into, that they understand the role they're applying for, the downsides of that profession, the sacrifices that may be necessary, and that the rewards are, you know, worth it to them, and are also sort of realistic and come from firsthand observation. They're also, you know, very, they really wanna see evidence and not just theories that students have had their own experiences directly with patients, and have a vision for a patient-centered future as a practitioner. And so that's really hard. There's no way to do that through virtual shadowing. You know, you can get some initial discernment, you can get a foundation of ideas. I think first year students and sophomores who are not able to find in-person things like absolutely, you know, that virtual stuff can keep you, you know, invested and give you a space to learn in when others are closed off, but at some point, you are gonna have to access those in-person experiences. Some volunteering has started to open back up, and it depends on where you are, right? It depends on the region of the country, it depends on your local, you know, county health department's recommendations, it depends on caseloads in your community, vaccination rates. So that's gonna vary depending on where families live when their children are at home. When their students are at school, we do have a few opportunities like MedPrep and PEMRAP that are running, but there is no doubt that demand far outstrips supply. I recognize that. Some of my students are opting maybe in, you know, the summer after their junior year, to get a full-time job in healthcare, that, stay here in St. Louis, get a job at a local hospital or, you know, urgent care or something, and then work part-time throughout their senior year. And if their curriculum is such that they can light load themselves

a little bit in that senior year so that working part-time is not, you know, gonna compromise their academics or compromise the rest of their college experience, then I think that's fine. Some of my students are just saying like, "I don't wanna work while I'm in college. "I wanna learn and be a student while I'm in college." And I have no objection to that. My own daughter, who's not premed, but she just tried working a halftime job, didn't stick with it very long because she said, "Mom, my quality of life is terrible "and I don't wanna do this anymore." And I said, "Well, you know, give them plenty of notice, "but you don't have to." You know, you can be a learner and you can learn that this is not for you. So I don't think that working a lot during college is the right thing for every student, and some of my students are just opting to take two gap years. So they'll do their academics and some community service and more campus-centered things during their four year of college, they'll get a job in a clinical setting with direct patient care, or they'll get a job in a clinical research setting where they have at least some part of their role as patient facing responsibilities, and then they'll work at that for a year, and then they'll apply, and they'll probably continue working at that same job, especially if it's clinical research, you know, that second year while they're interviewing. So I know that, you know, some families probably find the idea of two gap years just really distressing, because it's already a long road, and I wanna be honest about that, I wanna acknowledge that. And I, you know, again, this, especially for young people, all of the shutdowns, all of the closures, you know, the fact that it's just gone on and on, and even after many people are vaccinated, we still have to, you know, hospitals are still filling up and you know, ICUs are full, and there's still just so many sort of crisis situations in healthcare settings. If that is just, I think the fact that some students feel like they, that the best choice for them is two gap years is another cost of the pandemic.

**Renaldo Luna Gacad** - Speaking of gap years, are students who are on a gap year still able to access the really great resources that we have here, the advising, the career services, while applying to med school?

**Carolyn Herman** - Absolutely, even before everybody was set up to be virtual, which now, you know, right, We all had a year where we did everything from the comfort of our dining room, but even before that, we were, we had already put things into place to be able to work with students at a distance because we push students to really evaluate when they're ready to apply, when they'll be the best applicant they can be, and only to apply when they're really sure that this is what want. Sometimes students need more time to be clear about that path for themselves. And we do not wanna push people to a rushed judgment on something so important, and that, you know, is such a big chunk of their young adulthood. So we have long been in a position to support students at a distant, and work very hard to make sure that students have exactly the same access to resources no matter where they are when they they're applying, and frankly, no matter how far out of school they are. I have students who go and serve in the Peace Corps and then apply to medical school, and we, it is our privilege to work with them. We are happy to work with alums who've gone and done something else and then come back full circle and are applying to med school. Sometimes they don't come back to us, and you know, that's obviously, they're adults by that point and that's their choice, but we welcome the opportunity to work with them and provide our coaching.

**Renaldo Luna Gacad** - Carolyn, what percentage of pre-health students at Wash U. are able to achieve their goal of being accepted into say, a medical school or a veterinary school? And I know I'm asking you to like conjure up some numbers off the top your head.

**Carolyn Herman** - No, actually I have these numbers. You know, that's part of our assessment of our program. And the ones that I like, I have a top of mind, so I don't have numbers for veterinary medicine, I'll be honest, and I don't have exact numbers for a specific period of time for dental school, but it's very, very good. I think last year, everybody that applied to dental school got in. So it's very good. It's a much smaller population. So for students who are applying to medical school, 80% of our students, 80% of our first time applicants are admitted. So 80% of students get in the first time they apply that go through our advising system. Now, we publish some pre-matriculate, or some matriculation statistics that include students that did not go through our advising because the common app for medical school, which is AMCAS, sends us reports of all students who did their undergraduate work with us. So we don't, you know, we try to be really transparent, and we're also trying to provide this information for students to make, you know, data-driven decisions about how they're positioned as applicants, so we feel like including more information is better. But in terms of the students who are working with us when they apply, eight out of 10 of them are going to be admitted when, the first time they apply. Now, that does mean that, you know, one in five kids is gonna reapply. So eight outta 10 is a great rate compared to the national average, compared to most other institutions' success rates. We're really proud of it, but we also want students to know that it's not the end of the world to reapply. And if you have to reapply, nobody, you know, we know that's not the outcome you wanted, we know you're not celebrating that, but we are more than happy, we want to work with you to evaluate how to improve your application before you reapply, what can you learn from that first attempt at that process? And I will also say if you just wander around our medical school, you know, kind of buttonholing faculty over there and asking them about their own experiences back when they were, you know, leaving college themselves, plenty of them applied to medical school more than once. And, you know, arguably, if you're on faculty at Wash U. Med School, your career is going just fine. So it is not, it doesn't mean that you're not gonna be a good doctor, it doesn't mean you're not cut out for medicine, doesn't really mean anything except that, you know, you didn't figure out, you either didn't have all the pieces in place, all the evidence they're looking for, that this is really the right choice for you, or you didn't figure out how to articulate that evidence effectively. And like anything else that we do more than once, you'll get better at it.

**Renaldo Luna Gacad** - Carolyn, we have a number of folks who are asking specifically about Wash U. undergraduate pre-health students applying to Wash U. Medical School. Is that something that is like typical here, do most students choose to go to Wash U. Med or have an option to go to Wash U. Med, or are there other things and considerations that they may be making, or that you're encouraging?

**Carolyn Herman** - That's, yeah, that's a great question. So we always have the largest number of undergraduates from any single school in Wash U. Med, in every class at Wash U. Med. So, you know, if you count up how many people are from this school and how many people are

from that school, there's more from Wash U. undergrad than any of other single, other undergrad institution in each of the classes. That said, they have 120 seats. I have 350 people applying this year. Not everybody's gonna go to Wash U. Med because they, there's literally not room for everybody. The good news is, by the of time students are applying, regardless of what they thought they wanted when they walked through our doors as first year students, by the time students are actually applying, many of them don't really want to go to Wash U. Med. Many of them have other schools that they know will be a better fit for their personality, for their values, for their personal mission, for their eventual goals in practice. And you know, one way I like to tell this story is that I had an advisee who was very, very interested in primary care. He was from rural Kansas, and he was from a part of rural Kansas that I know quite a bit about from a previous lifetime where I was on faculty at a small college near where he lived. And I was so proud of him, and I felt like it was such a worthy goal to go, you know, to use his Washington University education, to go back home and deliver outstanding healthcare to, you know, his neighbors, the people in his community, where there is absolutely a shortage, and it is a, you know, it's not exact, it's not quite a healthcare desert, but it is really, there's a shortage of practitioners in this area. So I was so pleased that he wanted to do that. And of course the only logical place for him to go would be the University of Kansas. They have a fantastic rural health primary care program there. He would meet mentors that really understand the situation he's practicing in. What regional hospitals are available, when should you send patients there, and when should you, you know, try to get them to go further away to, you know, an academic medical center that for some of them, if they're out in Western Kansas, would be very far away? So, you know, it wouldn't make any sense for him to go to Harvard, right? How many hours would you have to drive out of Boston to even see a rural practice? And so not everyone's goals are the best fit for Washington University School of Medicine, and one of our jobs as advisors is to help students clarify and compellingly express their own vision for their future. What kind of patient populations do they wanna work with? What have they found really rewarding so far? Do they love research and see themselves doing that, you know, as physician scientists? Is that not really their jam, and they really wanna be focused on clinical medicine. And as, you know, practitioners, hospitalists, or in private practice? So yes, lots of our kids go to Wash U. Med. Not everybody wants to go there, and so that's a good thing, 'cause there's not room for all of them.

**Renaldo Luna Gacad** - Dean Herman, right now folks are, students are starting to think about what their summers are going to look like. They might be thinking about their coursework. So some families and students are concerned that medical schools might see their prerequisites taken over the summer as inferior compared to those same courses completed during a typical semester. Can you speak to this, and whether there is disadvantage or advantage to those courses being taken here at Wash U. versus in their hometown or a different area?

**Carolyn Herman** - Sure, I, yes. So in the past I would've always said, you know, you figure out the curriculum that really makes sense for you and allows you to have the experiences that you really want. So if you really wanted to start researching your sophomore year, and you noticed that organic chemistry lab takes up an enormous amount of time all year long, and that you don't really even have big blocks of time where you can get to the lab, and you think, I'd really

like to move Organic to the summer so that I can lean into research, you know, as a sophomore, stay my sophomore summer, maybe have my own project, really get something done there. I'm never gonna speak against that. A lot of my students move one of those big science sequences to summer so that they can study abroad. If you're gonna be gone for a chunk of your junior year, it's better not to be in a year long science sequence that junior year, and trying to cram everything down into the sophomore year is, you know, not the right choice for many students. It can be just too much. So I think moving something to the summer can absolutely make sense in a number of circumstances. I do want students to be reaching for something, that putting that coursework in the summer frees them up to accomplish something else rather than running away from something here. Like, I am confident all my students can be successful in the coursework here, so, you know, don't move Organic to the summer 'cause you think it's gonna be hard here, like, medical school's gonna be hard. But I think it is absolutely fine to move it to the summer, because you just think that's gonna be, you know, a more relaxing way to focus on the things you really wanna focus on, and some of that might be community service or it might be, you know, trying to, you know, maybe next year, we'll have volunteering more available at hospitals, and you know, you wanna lean into that, and you wanna make sure you have time to do those things. So I have no problem with that. I do wanna say, special caution to families this summer, that because we expect our summer school to be 100% in person, starting this summer, we will not transferring hybrid and online coursework. So if you're gonna do something at home, at your state school, or your community college, you need to make sure that it's gonna be a 100% in person. And so that's just another cost to the pandemic. Not all schools at home are moving complete back into person. Especially for summer, I've seen, you know, a number of schools are keeping stuff online, and I am the first to acknowledge that that creates an inequity. But that is our policy at this point.

**Renaldo Luna Gacad** - Carolyn, when do you suggest students take the MCAT? And I know that there are many different pathways, so we have questions for a student who might be looking at a traditional, not traditional, that's not the right word that I wanna use, that is looking to apply.

**Carolyn Herman** - Classic.

**Renaldo Luna Gacad** - Yeah.

**Carolyn Herman** - Classic timeline.

**Renaldo Luna Gacad** - The classic timeline. And then also, we have folks that are asking for a gap year timeline.

**Carolyn Herman** - So you have to have the MCAT done before you apply. Everyone should apply in very early June, and it takes 30 days to get your scores back, and I'm not a fan of applying blind without having seen your score. So I would say that means you have to take the MCAT by May of the year that you're going to apply. That said, I think for most students, balancing studying for the MCAT at the same time they are writing their application materials, so writing those essays about why medicine, writing up lengthy description about their most meaningful

activities, preparing pre-writes for some secondary essays. We ask them to do a lot of self-reflection, we give them a lot of homework to prepare them to excel in this process. And all of that homework may not balance beautifully against another big open-ended project that's also still not for a class and they've got a full slate of courses like studying for the MCAT. So I find that usually my students are best off if they take the MCAT by January, and then they can spend the spring semester just really focused on honing all of their application materials, you know, perfecting essays, rehearsing and refining their narrative, and then apply in June. Now, that January write applications apply in June could be during the junior year. Fewer and fewer people are opting for that. But if you're gonna go straight through with absolutely no time out between undergrad and med school, that's what that looks like. Take the MCAT in January, write your applications in the spring, apply in June. It could be in the senior year, it could be three years after you graduate. But that timeline of, you know, sort of get the MCAT in the bank and then turn your attention to writing outstanding essays, I think is an effective strategy no matter when you tackle it.

**Renaldo Luna Gacad** - We have two quick questions about the gap year experience. So I think the first one is, how would you recommend students who already know they want to take a gap here, how would you recommend that those students stay in touch with the pre-health area here at Wash U., or are there things and steps that you would suggest that they do? And then I'll wait on the second question.

**Carolyn Herman** - Okay, so honestly everyone, by the time they are taking a gap year, should have a relationship with their pre-health advisor. So just stay in touch, you know, check in with them at least once a semester just like you would if you were on campus. And we, you know, we're, we all have Zoom appointments, we all have Zoom walk-in hours or other hours. We can all work with students remotely. Now, if you've got a, you know, an eight to five job, and I kind of have an eight to five job as well, maybe you have to do a little more to, you know, sort of make sure that you can get an appointment on my calendar when you're gonna be able to, you know, take a lunch break or, you know, some, or leave work a half an hour early or something. So there might be some planning, you know, around that, but that's just part of being a grownup, right, and they'll do it.

**Renaldo Luna Gacad** - My second question is, especially for folks who have students who may be as like, first years or second years and early on in their discernment, how do students hear or find out about what a gap year pathway, or just like a general, what pathway's right for them would look like? Is that something that they should be thinking about before they start meeting with their pre-health advisors? Is that something that they need as they start meeting with you all?

**Carolyn Herman** - Yeah, I think that for most of my students, I mean, some of my students have like very strong ideas about, I am going to take a gap year, in fact, I'm gonna take two gap year. I'm gonna spend my first gap year in Israel and I'm gonna, you know, I've got these projects I'm doing over there, and then I'm gonna come home, I'm gonna apply, and I'll work back here at home while I'm interviewing. And like, if they've got a vision for, you know, how it's all gonna fit



together, like, go, great. We are running with that, I love that. Other students are like, well, I guess I always assumed I'd go straight through. Why wouldn't I? And so we uncover together what the best timeline for them is by looking at what have they, you know, what competencies have they developed? You know, the AAMC has a number of pre-med competencies that we draw their attention to, so we assess what competencies have they developed and at what level of mastery, and are they ready? Are they approaching a point where, you know, that it's clear they're going to be a really strong candidate, and when is that? And we don't, you know, on my team, our advisors don't feel like there's a deadline. You know, we just don't feel like, we feel like the student will mature at their own rate. They will gather the experiences at the right time for them, and when they finally have their basket sort of full of all the experiences, you know, competencies that they need to be compelling candidates, that will be the right time to apply.

**Renaldo Luna Gacad** - Can you speak a little bit, we're gonna shift gears a little bit, can you speak to the breadth of experiences that the pre-health advising team has, and with the changing aspects of, well, the changing admissions pieces that might be affected by COVID? Like, what are ways that the, that your team has sort of like noticed or helped address those?

**Carolyn Herman** - Sure, I'm, we have a really broad range of experiences on the team, which is a huge asset for us, because it means we have, you know, if students have particular needs, we've probably got somebody to direct them to that will be a good fit for that. I've got semi-retired physicians who work through the Career Center on a part-time basis, they help us with mock interviewing, but they also, you know, just serve as pre-health advisors. We have, you know, Dean Tony Smith and I both trained as scientists, so we've got, you know, sort of deep bunch of scientific expertise on the team, in addition to the, you know, our, my physician colleagues. But I've also got a colleague who trained as a medical social worker, you know, and so sometimes when students are, you know, particularly having trouble deciding, is this even right for me, she can be a great thought partner for them, because in some ways she's just got, even in her academic training, she just has some skills that, you know, I've maybe developed more informally over the years, but that, you know, she just has a, she's got a deeper toolkit with. So we really do have a broad range. We partner with a career, with the Writing Center as well, so we have professional writing coaches that, you know, come to my team meetings, really understand the medical school application process, understand what medical schools are looking for, and therefore are in a really strong position to help coach students as they're trying to write their personal statements and their other application materials. Yeah, it's a, we've got lots of different academic disciplines, but also lots of different sort of professional expertise in training.

**Renaldo Luna Gacad** - Two quick questions about the MCAT. Has, how has COVID-19 impacted the MCAT process? Is it being offered online? Is that, is it a seated exam? Has that shifted and changed?

**Carolyn Herman** - So the MCAT has been online only for a long time, since` maybe 2010 or so. So that's not a change. That is not a pandemic-driven change. For a while when, you know,

when we didn't have access to vaccines, and you know, distancing was so much more important, and when, you know, certain caseloads were at a danger level, some testing centers closed completely and had to reschedule everybody. So there was, you know, if you have some older, you know, friends or relatives, or, you know, people in your community organizations that are talking about that nightmare of never been able to at an MCAT, like that was a thing for a moment in time. That's over. I mean, unless we have a new variant that vaccines really don't protect against, which I guess is not a zero probability event, but I don't anticipate, I don't myself personally prepare for that to be a barrier for my students. So the MCAT is something you register for online, you go to a physical testing center to take it, and, but it is on a computer and has been for a long time. And they, you know, there are not any medical schools that I know of that are even considering a test optional type of situation. Everyone has to take the MCAT if they're going to medical school.

**Renaldo Luna Gacad** - A follow up on it, how long are MCAT scores acceptable when, acceptable for when applying to different school types?

**Carolyn Herman** - Yeah, schools typically will either accept them three years out and some five years out. There's a little bit of variation there, but three, they almost always, you know, will last at least three years.

**Renaldo Luna Gacad** - Shifting gears a little bit more. If a student is interested in getting involved with research, where should they start, and what kind of research experiences would be most helpful for medical school applications?

**Carolyn Herman** - So I love when students want to do research, we, you know, that's a really strong part of our identity here at Wash U., right? We're a Research I institution, and our medical school is a research powerhouse. So those are real strengths that we have here. So I love when students take advantage of something that we can offer that they can't get just anywhere, right, that that's part of maybe what drew them here in the first place. That said, research is absolutely not required for medical school. So if your student is not interested in doing research and is much more involved in their community service and in, you know, I don't know, whatever else they're doing, there are many other things that are still congruent with eventually going to medical school that are not research at all. So you don't have to badger people to do research if they're premed, if it really holds no interest for them. But if there excited about it, I love that. I think it, you know, and most of my students, about 84% of my students who applied to medical school in a year, a few years ago, the last time I, you know, went through and counted, which I kind of have to do by hand, had done some research before they went to medical school. So that does mean 16% had, and these admitted students. So, you know, it's absolutely not required. If you're looking to get a start, I think going to the Undergraduate Research Offices homepage and clicking on the How To Get Started tab is absolutely a great first step. They have some really great advice. They still wanna work with you individually, but I think if you go and look at that Getting Started tab before you schedule an appointment with somebody in the Undergraduate Research Office, you're gonna have better questions and you'll make better use of your time together.

**Renaldo Luna Gacad** - So you had mentioned that some students think about studying abroad while also pursuing pre-health. How could studying abroad impact their pre-health courses or application to med school? Is it something that you would suggest or not suggest?

**Carolyn Herman** - I love for my students to study abroad. I think, you know, cultural competency is actually one of the AAMC's core competences that they want students to achieve before they come to medical school. Having that perspective of actually living in a different country, and seeing things from a point of view that is by definition alien to you, I think can only enhance your cultural competency, and so I love that for as many student as, you know, not everybody wants to do it, not everybody. It, there are some trade-offs. You give up a semester at Wash U., there's no doubt. So there are some trade-offs, but for my students that wanna pursue it, I'm a fan. I am an enthusiastic supporter of that. Most students who take, who study abroad for a semester during the regular school year will probably need to take a gap year. It's a lot for, you know, more than half of my students are taking a gap year period, regardless of study abroad. It's a lot to get done in only five semesters. It's a lot to get done in only six semesters. But if you go abroad, you really only have five. You really can't, you can utilize your experiences abroad in sort of the you know, the co-curricular aspects of your application, but you can't include any foreign coursework on your medical school application, which means you're not gonna really be able to utilize letters of recommendation from abroad, you certainly can't take any of your core pre-med courses abroad. So for most students that's gonna mean, and while it's great to have clinical experiences in, you know, other settings as a compare and contrast, it really does need to be compared to substantial clinical experience back home. And so again, having one less semester to work that in, you know, often means that students just need a little more time. But I think there's nothing wrong with a gap year. There's no fire when you're, when you're 40, it is not gonna matter what year you started medical school for sure. And so I encourage students to go abroad and just plan for that gap year. I think it's fantastic.

**Renaldo Luna Gacad** - Carolyn, I know a lot of our questions so far have been really focused on the pre-medical school experience. Can you speak to the pre-health area's outside of premed that your office supports, or that your area supports, and also in particular, we have a couple of folks asking specifically about their students discerning around public health.

**Carolyn Herman** - Absolutely, so we've got specialist advisors for a number of more common pre-health interests. We have a pre-dental advisor, we've got a pre-physician assistant advisor, we have a pre-nursing advisor, pre optometry, pre-physical therapy, pre-occupation therapy. So there are like dedicated people in all of those areas. Now, obviously, oh, and pre veterinary, I forgot that one. Obviously there are other, you know, I had a student not too long ago who was like, "I think I wanna be a genetic counselor," and that doesn't come up often enough or frequently enough that we have a person dedicated to that, but of course, you know, it, that then becomes like any their kind of graduate or professional school application. You know, your advisor is gonna work with you, but you're gonna do most of the legwork of figuring out what are the requirements, how do I figure out if I really wanna do this or not? But, you know,

certainly your advisor is there as a supportive sounding board and a, you know, a coach and a, and you know, a reflection partner. Public health, there's a huge amount of interest in here, no doubt. Our global health and environment major is wildly popular, and so lots and lots of students are interested in public health either locally, you know, or here in the U.S., or they're interested in a, you know, sort of a global application of public health. If students have a practice area in mind, like they they know they want to go into nursing and they wanna have a public health background, or they know they wanna go into medicine and they wanna have a public health background, there are plenty of dual degree programs. I think figuring out whether you want to just, you know, have an MPH and work specifically in public health on population-based health, or whether you want to inform an in-person one-at-a-time practice of some kind with a public health sort of perspective, I think depends on, do you wanna work individually with patients or not? And that really is why, you know, students need to do that career exploration and discernment piece. My own kid who has already graduated from college is fortunately gainfully employed. She had an undergrad in public health and is gainfully employed at a place that's gonna eventually pay for her master's. So Mom is super excited about that. And, you know, but she has no desire to actually see individual patients. She's very, very interested in, you know, she likes data analysis, she's very interested in thinking about what works to improve population's health and, you know, outcomes, evidence-based things for all of us, not for one of us at a time.

**Renaldo Luna Gacad** - For, can you speak really briefly about where students can find shadowing opportunities closer here to Wash U. or in St. Louis? Where should they go to find?

**Carolyn Herman** - Yeah, I think most students, even before the pandemic, I just wanna say that even before the pandemic, I would tell students and their families, you know, we have some courses here. If you get involved in a lab that, you know, has your PI is an MD, PhD, and they have a, some clinical practice, they, you know, have a day a week or half a day a week in clinic, you may be able to shadow, you know, someone for your, from your lab. That's a possibility. We do have some courses, we have PEMRAP and MedPrep. Those are not gonna happen for you until you're a junior or a senior, but, you know, later on you can sign up for those courses when you're registration priority makes you actually eligible. So, you know, and there are some roles, some volunteer roles here in town that might include an aspect of shadowing. So, you know, if you are work, you know, if you are volunteering in a healthcare setting, maybe there will be, you know, part of your role may be such that you aren't necessarily gonna leave the room when the physician comes in as long as you're, you know, kind of appropriate and respectful, and you you've cleared it with service in advance. But I would've always said shadowing is gonna be easier to access at home where you know people. You know, cold calling a doctor here and saying, "Can I come and shadow you at your practice," like, even before the pandemic, they might be like, "Mm," you know, "do I really need another kid running around?" "I, you know, I'm already busy. "I already got a lot going on." But when you know people and you're like, you know, honorary Aunt Jane, who's, you know, orthopedist, "Can I come to clinic one day "and watch you talk to your patients "with their ACLS and their other injuries," you know, you're the person who's been your honorary aunt for your whole life is like, "Of course you can." So I think people are often better off utilizing their networks at home. And if there's

nobody in your family or your friends, you know, of family that has anything to do with healthcare, which is actually kind of rare, because, you know, so maybe your, you know, cousin is a nurse. That could still be a valuable shadowing opportunity, and could even lead to, you know, some physician shadowing, if that's really what you're looking for. So I think sometimes people say like, oh, I'm not related to a doctor and don't kind of think beyond who do I know that's just in healthcare? But also, everyone sees doctors. So ask your pediatrician, ask your parents' physicians, you know. Now, I will also say, the response you get may vary during, you know, during the pandemic. People may just say, "No, we don't have observers. "We're not even letting medical students in right now. "We don't have observers in our office. "We are," you know, "we are distancing, "We are insisting that everyone masks "and we have no non-essential personnel, "and that's gonna be our strategy until," you know, whatever their marker is for, you know, when it's safe to do it differently. And I think if that's the response you get, you just have to graciously accept it, because the physician's role really is to prioritize their patients' safety.

**Renaldo Luna Gacad** - What should a student do if they don't get into medical school when first applying?

**Carolyn Herman** - We've got a whole section of our website actually dedicated to what if I have to reapply? Because, you know, we don't run around acting like that's some Scarlet Letter that you need to be ashamed of. I look at it more like if you're a basketball player. Okay, so you missed a free throw. Let's look at how you tried to get the shot off and what you can do better next time.

**Renaldo Luna Gacad** - So we're going to ask one last question for the evening. Carolyn, thank you so much for the information that you've shared tonight. What is your last piece of advice for families as they talk with their students about standing out in their medical school applications?

**Carolyn Herman** - So I think that the students who stand out are the students who really have an authentic story to tell about why medicine is the best place for them to make their contribution to society. So they've learned enough about what medicine really is, what that, what being a doctor really means, or what being a dentist really means, and what the sacrifices are, what the downsides are, what the unpleasant parts are. But they also have learned enough about whether, you know, that they really, that they're energized by working with people even who may not be at their best when they are injured or ill, that the privilege of being with somebody when they're in a very vulnerable position, when they're ill or injured, is something that they have some skill with, and that they want to get better and better at. So that, you know, I don't think there's any, there really isn't any secret sauce. It really is just like, you know that you're doing this for the benefit of your future patients, and their health and their wellbeing is really, really important to you, and you're able to express that clearly.

**Renaldo Luna Gacad** - Thank you so much again. Families, we hope you were able to learn something valuable this evening. As a reminder, this webinar recording will be shared at

families.wustl.edu next week. So we ask that you stay tuned for our next webinar, a conversation about Mental Health Services occurring on Wednesday, March 2nd, at 5:30 p.m. Central Standard Time. You'll get, you'll be able to register for that webinar at families.wustl.edu, we'll see you then.