

# INDIE MAJOR PODCAST

## 2/12/24 Krithika Santhanam

**Individualized Major:** Health Policy and Racial Disparities

Ken:

This is Indie Major, a show devoted to the wide-ranging stories and visions of individualized majors at the University of Connecticut. I'm your host, Ken Cormier.

Well, I'm here with Krithika Santhanam, an individualized major at UConn. Hi, Krithika. Hi. How are you?

Krithika:

I'm doing well. How are you?

Ken:

Good, good, good. So why don't you tell us the title of your major and tell us a little bit about it.

Krithika:

Yeah. So here at Yukon I'm pursuing an individualized major called health policy and racial disparities. I decided to choose this major because a lot of people do that very precise public health major, community health major. And it's something that I heard a lot about in high school. And I kind of came in with this mindset of, okay, those majors aren't here, so I'm just going to be your typical molecular and cell biology major as my backup, because I wanted to go to medical school, and that's kind of what I want to take, but it's only

when I took a Capstone course and an Aspire course in high school, where you kind of have to choose something that you want to pursue, that I kind of got to learn more about this field of public health and these really important issues in the topic of public health that kind of steered me to where I am today and the major that I chose.

Ken:

Interesting. So you're pre med and you still are a molecular and cell biology major?

Krithika:

Yes, I'm a double major.

Ken:

Okay, so you're doing all that, all the medical stuff and then you're adding on this kind of public health focused major. Do you imagine that by doing this, you'll be able to pursue the kind of career in medicine that you'd want to. Whereas, if you just pursued the science, it would limit you?

Krithika:

Oh, 100% I'm currently taking genetics, which is a course that most pre medical students take. But the way I look at the course is from a perspective that most pre medical students don't look at the course from through my major. I've taken classes in the Human Development and Family Science department, as well as the Woman Gender and Sexuality Studies department about biotechnology, disability in the family. And these concepts of gender and science and how we kind of think science as objective when science really is subjective. And because of that, I'm looking more of these topics of medicalization where doctors and physicians, and there's always this notion that things need to get fixed. There is this one type of person and I come in

with like response papers and discussion boards and posts where I have a very different perspective than my peers that I don't think I would have been able to develop through my own ideas and my own learning if I didn't take the courses that I did with my individualized major, which I think will make me a better physician in the future.

Ken:

So physician is definitely in your future? Any particular type of physician?

Krithika:

I'm still really open. I think that's why I was really intrigued to the individualized major program. 'cause it's so open in the sense of you kind of take the journey as it goes. So I'm not 100% sure women's health is something that's definitely on the top of my list that I am exploring right now.

Ken:

Now, I believe you're working in a lab right now is that right?

Krithika:

Yes.

Ken:

And this is over in the molecular and cell biology side of things?

Krithika:

Yes, at UConn Health.

Ken:

Okay. So I would love to hear about what kind of work you do in a lab and what that lab setting is like.

Krithika:

Yeah. So I'm currently in Dr. Caroline Dealy's lab at UConn Health. We're trying to currently find a cure for osteoarthritis. That is the long term goal, but we're looking at these two signaling pathways. The bone morphogenic protein pathway and when we've knocked out that signaling pathway, we've noticed that there are these new generation of cartilage cells that could somehow be manipulated for patients who have the spontaneous loss of those cells. So in this environment I'm really just sectioning tissue samples, I'm staining them with different antibodies. Currently we're at that stage of analysis, so I'm writing abstracts for conferences. I am doing a lot of statistical analysis, photography, a lot of skills that I've kind of developed over the past two years that I've been in the lab. This is my third year that I'm going to be in the lab, but I've kind of taken a step back from the lab, actually, as I've been recently joined the sixth cohort of bold scholars. And I have that project that's coming this summer, so really more in the analysis part right now than actual experiments.

Ken:

Okay, I was going to ask about some of the other things you're doing, because I know you've received some awards and scholarships. So you mentioned the Bold Scholar Project. Is that a different kind of project? And what's that, what's what's happening with that?

Krithika:

Very different. This actually is what's going to be my honors thesis. My individualized major is my honors major here at Yukon. I'm going to be looking at disability in the institutions of healthcare in India, where healthcare is kind of separated by private and governmental health care. Very different than the social and medical models of disability that we've kind of defined here at the United States. And that's really what I've been learning about. But I realized you can't take those models and put them in a, another country. You have to kind of generate a model, which I'm learning about right now by doing a lot of literature reviews and things like that. I'm going to be going to Chennai, which is in the south of India, and I would be going to be conducting my project with a local hospital there. I'm going to be doing a little bit of private work, clinical work, and then also at governmental hospitals as well.

Ken:

Are there really big, stark differences between kind of Western approaches to medicine and Eastern approaches?

Krithika:

Yeah, I'm actually taking a class right now which is about underrepresented students and stem. It's actually a molecular and cell biology course. But I chose it because it's a very different approach to like research literature. And I actually have been studying like Chinese herbal medicine, where it's a lot of like allopathic medicine, the full body using herbs instead of drugs as a treatment and things like that. I think it's just not a first source of treatment here in the United States yet because it's not well known. But most people are relying towards it because it's less drugs than other types of medications in their system and it's culturally, there's evidence of it culturally than like in the literature, which is why I don't think it's as prominent, but I think that it should be used more here in western medicine. Because I think that now that we have a more diverse array of physicians who come from a lot of different places, there's more prominence of it now than it was like 20 years ago.

Ken:

So this idea that you mentioned earlier about that science, the STEM sort of part of medicine is about fixing things, right? That mentality of fixing it. Is there a difference there between kind of, and I know, you know, Western medicine is of course not just one monolithic thing, and Eastern medicine is not just one monolithic thing. But is that kind of more of a Western idea? You think the fix it approach and is there something else going on that medical professionals are maybe becoming more interested in?

Krithika:

Now I personally think it's more of a Western concept because we have these historical issues of eugenics and issues that although we have a new perspective and we know that a concept like eugenics is wrong, there are still implications of those historical ideas, philosophies that are still in our institution of health care today. And it's this process of how we are educating our upcoming doctors and the residency programs. They go through the ideas that physicians now are teaching them, that I think is really important. That make the face of what Western medicine is. And there aren't a lot of changes because these common misconceptions like for example, black women don't feel pain. That is consistently in medicine. Because we haven't really changed those notions by going back and looking at these concepts from a different perspective.

Ken:

Wow, all right, I want to switch gears for a second here and ask you, how long have you wanted to pursue medicine? Is this something that you can trace back to childhood or did you have other ideas about what you wanted to be?

Krithika:

So my mom said, I, for the longest time, she still says this, but she says I'm really good at talking. I'm a very social person. So for the longest time I actually wanted to be a lawyer, I was like, I want to go up there. I want to fight for people who are unable to advocate for themselves because they didn't have the education and the opportunities to get that knowledge. And that was really my goal. I came here wanting to do somewhat, something like that. But I think I came to high school and I took my Capstone course. And then I was able to sit in at the University of Minnesota's Department of Surgery's like Health Care Disparities Group. It was during Covid, so everything was online, so I had easier access to those things that I realized that even as a physician, even though you're doing like the hands on medical approach, you still can make an impact from that role. It's harder because you're kind of seeing the patients outside of their normal environments. But I kind of realized that this is what I wanted to do and I wanted to be there to advocate for patients, usually during times where they are unable to advocate for themselves.

Ken:

Interesting. So the same kind of motivation in a way transferring from law to over to medicine.

Krithika:

Yeah.

Ken:

So when you think about your future, obviously physician, we've kind of covered that. Do you think of yourself working anywhere in particular or are you thinking globally or are you thinking of the US? What do you envision when you think about your ideal position in your career?

Krithika:

Yeah, so I really want to start off working in an area where healthcare is not accessible in the sense I want to be able to. These are probably things I could be doing during medical school, but going to clinics in underrepresented communities, areas where people are kind of hesitant to go see the Dr. due to biases, implicit biases, their first thing is to maybe go to the streets to get medication or to hold onto the pain until it really becomes bearable and things like that. I want to start off there and then that could be in a global setting. I'm not really 100% sure. I really just want to work with communities that I'm constantly learning about in the classroom. That I'm learning that these issues are there. But I want to see them firsthand and I want to be able to do some sort of small impact firsthand. A lot of people what they do is they look at big issues and they want to make big changes. But in order for those to happen, you have to be able to make small changes little by little. So I want to start my journey by doing those small changes. And maybe I could somehow be involved in like a policy change, which is really the ideal thing about my major is the policy changes we can make. So I'm learning about all those, but I can't go straight to helping make policy changes.

Ken:

Right. And then there's medical school. This is going to have to happen right at some point, which you must be having on your mind. You're graduating when? This spring?

Krithika:

Yeah. Yeah. Yeah.

Ken:

So I'm sure medical school is on your mind. I'm sure you're looking at medical schools.



Krithika:

Yes.

Ken:

I won't go into all that because you probably think about it enough already. But it does occur to me to ask. So a lot of the stuff you're talking about, you know, is on that side of thinking about underrepresented populations, of thinking about helping those who don't have as much access as others. And so a lot of that is on the individualized major side. Certainly there are plenty of students who might want to just study just that, right, and not necessarily do the medical science route. Do you think there's something about the combination of the two? We've talked a lot about how your understanding of the public health side will enhance your experience and maybe your approach as a physician. Do you think there's something about, does understanding the medical science side also inform the more sort of social cultural stuff that you're studying in your individualized major.

Krithika:

So I think it's that I understand that health outcomes are worse in populations. And I'd say, okay, I'm learning that in certain communities due to residential segregation, things like that, they are known to have worse health outcomes. So I'm like, okay, so then what are these worse health outcomes? How are they generated? I don't understand that concept sometimes when I'm in a social science class or a humanities class. But then let's go over to Biochem, which is a class I recently took. It took a lot out of me, but now I'm learning about pathways and things like that and stressors. And how that could be enhanced through environmental stressors within like your blood circulation and things like that. And I'm able to make those connections. And it may not just be from humanities to science, it's a constant back and forth from each direction that I'm making, connections that it takes some other students longer to make. And sometimes you don't see the bigger picture or you don't

see like the smaller picture of the class you're in right now. But I'm constantly able to make both of those pictures per se in all of my classes.

Ken:

Wow, that's fascinating. Anything else that we didn't cover that you can think of that you wanted to mention about what you're doing here at UConn?

Krithika:

Yeah. For anyone who's listening, I just want to say it's okay to take risks and do something that you didn't think would be possible. At this University, I came in thinking, oh, it was going to be public health or nothing, MCB or nothing. And then I took my class where I learned about what an interdisciplinary major is, what that entails. And then ever since then, I've kind of just been doing a bunch of different things that seem interesting to me throughout this journey, which has actually started ever since my individualized major. And I couldn't be happier with where I am. So make sure you surround yourself with people who are encouraging you to take those risks and try those new things here at the university. And you may go through this path of discovery and learn about so many new things about yourself that you wouldn't have known before.

Ken:

So wow, well, that's great. That's what we always hope that students can discover through this kind of a program. So thank you so much. It was just such a pleasure to talk.

Krithika:

Thank you.

Ken:

Thanks for listening to Indie Major. If you'd like more information about individualized and interdisciplinary studies at the University of Connecticut, please visit our website at [iisp.uconn.edu](http://iisp.uconn.edu). That's [iisp.uconn.edu](http://iisp.uconn.edu). We'd also like to thank UConn Enrichment Programs and WHUS UConn Radio for their support of this show.