Sarah Alger: Welcome to Proto, a podcast that explores the frontiers of medicine. I'm Sarah Alger.

Dr. Justin Chen: And I'm Dr. Justin Chen. In the United States, more than 12% of all PhD students in the sciences come from China. Chinese students have played a major role in US research for decades, and they contribute to our scientific institutions, not only with their tuition fees, but with hard work and smart ideas.

Sarah Alger: The Chinese students in the US now face a time of unprecedented tension. We'll hear about some of the new obstacles they face, including new visa restrictions and research departments behaving with shocking bias, prompted in part by new pressures from the State department.

Dr. Jenny Lee: It's a zero some idea that the US has every thing to offer, and the Chinese are coming here to take it away from us. I mean, that's essentially the write-up that is used to justify proposals and policies to limit collaboration with Chinese students, scholars and scientists.

Dr. Justin Chen: We'll also look at the stress the current climate has created for these students and what institutions can do to keep the doors open to their many contributions.

Sarah Alger: The important and impossible role of the Chinese graduate researcher, coming up on this episode of the Proto podcast, brought to you by Massachusetts General Hospital. Graduate students are the lifeblood of any research institution, and it may surprise you to know that international students are the lifeblood of most graduate programs in the STEM fields, especially. 81% of graduate students in electrical engineering for instance, come from outside the United States. Just over a million students, seek their advanced degrees here about half in STEM fields contributing $37 billion a year to the economy and advancing the frontiers of US research. Among this population, students from China make-up by far the largest number, about a third of the total. Chinese researchers have worked on some of the greatest breakthroughs of the past decade and some, like Daniel Sui, the Chinese born physicist who won the Nobel Prize in 1998 have forever changed their field, but Chinese graduate students in 2019 are increasingly in a tight spot.

The State Department announced last year that it was curtailing the visas of Chinese students and only Chinese students in some graduate fields. And for its part, the Chinese government has escalated its side of the research race angling for students to come back home. In June it warned Chinese students that graduate education in the United States was increasingly a dangerous bet. Caught in the middle Chinese graduate students in the US are navigating what has never been an easy road. They face new cultural stressors and sometimes outright discrimination while trying to discover new ideas in a foreign country.

Here to speak with us today is Dr. Justin Chen. He is the Co-Director of Primary Care Psychiatry at Mass General Hospital. He's also the executive director of the MGH center for cross-cultural student, emotional wellness and his study of the curious position of Chinese students in America and his thought about how to support this critical part of the research community. Dr. Chen, welcome.

Dr. Justin Chen: Thanks so much for having me.

Sarah Alger: I'd like to read one of the most striking statistics from a paper you wrote in 2015, nearly half of Chinese international students in one US study showed signs of depression compared to just 12% of Chinese students who stayed in China. So students who came here seemed to have a harder time than those who stayed at home. What do you think is behind those numbers?

Dr. Justin Chen: So those really are striking statistics. And I just want to clarify that in most of the studies like this, they don't actually look at rates of clinically diagnosed depression. So we're not sure if those students would actually meet criteria for major depressive disorder. They look at symptoms of distress, so problems with sleep, appetite, energy level, et cetera. So we're not exactly sure how to interpret that except to say exactly like you said, that the Chinese students who come to the US to study seem to have a higher burden of distressing symptoms than those who stay in China. And there've been a lot of studies that have tried to understand what some of those stressors might be or when some of the contributors might be. And those include things like homesickness, language barriers are a huge one, culture shock, perceived discrimination, and also all the worries that accompany being an international student, just academic achievement in general, but visas and future job prospects.

Sarah Alger: So they're already mental health problems in US graduate education, medical students are seeing higher rates of burnout and suicide, to ask the obvious question, is it worse for these foreign students?

Dr. Justin Chen: It's a really important question and not one that's unfortunately been very well studied. For instance, in the paper that we just discussed that was done at Yale University, it was a mixed sample of undergraduate and graduate Chinese students. And unfortunately they didn't have a comparison group that was US born, so it's really hard to know exactly how those rates might compare. It may be that the international students were doing poorly, but so were the US students. And it does seem in recent times, there's been a lot of attention in the scientific literature about rates of depression, burnout, et cetera, in all graduate students from different racial and ethnic backgrounds, so I think this is a problem. That being said, I would imagine as international students, there are increased stressors, the ones that I mentioned as well as decreased supports and all of those could contribute to higher rates of concerning psychiatric symptoms.

Sarah Alger: So to start talking about solutions, one of the topics you've studied is service use, getting people in need of psychiatric care to the resources that can help them. You've looked at this problem, both with student populations and with Chinese immigrant communities, are there any particular lessons about getting more Chinese students connected to the care they need?

Dr. Justin Chen: So this issue of trying to engage culturally diverse populations into mental health treatment, this is actually the passionate of my career and why I do what I do. And it for me actually began during residency training at MGH and McLean. I had worked for a while at South Cove Community Health Center in Boston, Chinatown, it's predominantly immigrant lower socioeconomic status population. And what I quickly found was that many of the tools of Western medicine in psychiatry that we had to offer just were not of interest to this population and were actually actively stigmatized. So those are things like medications and psychotherapy. And so from there, I shifted my focus from treating those populations to understand how can we better bring them into care and make them recognize the importance of emotional wellness for overall health.

And I knew that not just from clinical experience, but also intuitively from my own family and looking at their friends and extended family, seeing what they had struggled with. And so I was really intrigued by the question of how to translate the great knowledge that we had in Western psychiatry about psychotherapy, medication management, to these populations that really conceptualize their illnesses very differently. And the other thing that struck me was that many immigrants come to this country specifically for the purpose of providing more opportunities for their kids. And so having learned about motivation and how to engage folks, we realized that one possibility would be to shift our focus really away from the parents' generation to the students and framing the outcomes in terms of, or framing the issue in terms of outcomes that matter to the populations that we want to treat.

So for all those reasons, in 2014, I helped to co-found this MGH Center for Cross-Cultural Student Emotional Wellness that you mentioned. And really our focus is we're a consortium of clinicians, educators, and researchers who are passionate about understanding and promoting the mental health of diverse student populations. So we've shifted our focus much further upstream, away from acute medical care, when it's already turned into something like depression and more towards the public health approach, education and primary prevention. And so with two colleagues in 2014, we founded the center. The two colleagues are both psychiatrists in Boston, Albert Yeung, and Lusha Liu also affiliated with MGH.

So getting back to your question, I think this is a complicated and very important question about what lessons have we learned and how do we best engage people like Chinese international students into treatment. And again, I think that it is about reframing the conversation in terms of outcomes that matter to the students you're trying to help. So we really try to use language and concepts that are understandable and acceptable to them and we've written about that in our center, really de-emphasizing more stigmatizing concepts or terminology like depression or anxiety and emphasizing things like stress which are cross culturally acceptable through across a lot of different populations.

Sarah Alger: I'm just curious what makes stress an acceptable problem?

Dr. Justin Chen: I think it's just a concept that people from many different cultural backgrounds can understand and appreciate. We've all had times where we were under stress. I think when it turns into a mental illness, that's what becomes stigmatized because that's been studied extensively by cross-cultural psychologists, anthropologists, in China. There's just a much less emphasis on psychological symptoms, usually more of an emphasis on physical. And so if you start to move into an area of mental illness or psychiatry, people will tend to want to move away from that. There's a shunning or a stigmatization of that sort of conceptualization of things, whereas stress, everyone can understand. And so often when speaking with students or their families, I'll say something like, any organism, including non-human organism when under a significant stress or strain will exhibit certain symptoms or signs that you may call one thing, but in the West or in psychiatry, we call something else. And by the way, we have certain methods, therapy, counseling, or even medications when it's severe, that can help with that.

Sarah Alger: Oh, interesting. So do you find it's easier or more difficult for students in medical fields to seek psychiatric care?

Dr. Justin Chen: That's a really interesting question. I actually see some parallels between the Asian and Asian American students, international students that I study and I treat, and actually the medical students that I teach in one of my other roles, in both cases, there is a strong kind of pressure to achieve and to appear very competent at all times. And I think significant stigma and shame surrounding mental illness, a reluctance to be perceived as weak. So especially in a hyper competitive environment, such as medical school, I think it can actually be more difficult for students to reach out for help and seek care, even though theoretically, they're learning all about psychiatric illnesses and how to treat them, and the fact that these are treatable illness.

Sarah Alger: So how do you begin to create an academic environment that promotes the mental wellbeing of an international student body?

Dr. Justin Chen: I do think that universities are starting to pay attention to this and do it. And at the same time, we're talking about culture change, which is difficult and takes time. I am a strong believer that one of the antidotes to the stigma and shame that we were talking about is actually self-disclosure, vulnerability and openness. And so I think that stance or attitude could be modeled by more senior students and also by faculty, staff, people in positions of authority and power on campus. I also think it would be great if students could be presented with more realistic expectations of what it's like to go through these types of rigorous educational environments. I remember in med school, actually the Dean of students in one of the intro lectures, drew a graph of what we could expect during the course of our first year and drew this dip that occurred during winter, which is true, when you're like, wow, I'm really in this. And I feel a little in over my head and it's dark and the days are long or the days are short, sorry, the nights are long.

And that was helpful because it was anticipatory guidance. And this isn't to say that the students should somehow be coddled or shielded from the challenges that they're going to face, but I do think that certain experiences could be normalized. The fact that it's perfectly common to struggle and sometimes to not do well. And that success is both academic, but also social, emotional, and relational, that there's many ways to define being a successful student. And also that there are times to seek help. Speaking of seeking help, I think specifically for international students, a lot more psycho-education is needed, explaining those concepts that we had discussed before, like stress, depression, counseling, what is counseling?

It's surprising that some students from China actually have a very different view of what psychotherapy is or counseling, they think that it might actually be psychoanalysis like five days a week or in some cases even hypnosis, so there are these conceptions out there and so we could demystify that. I think that university counseling centers could actually be much more proactive about addressing common myths about seeking help. So for instance, the idea that going to see a counselor would cause you to lose your visa or that the information that you shared with your counselor could be also shared with the student's parents or their professors. I think those types of things are clearly not true, but just not known to these students. And finally, I think it's very important for counseling centers to make sure that if they have a large Chinese international student population, it would be helpful to have a bilingual Mandarin and, or Cantonese speaking therapist on campus, as well as cross-cultural training for their other clinicians.

Sarah Alger: So you've touched on this a bit already, but you've written extensively about culturally sensitive mental health care. Can you talk a little more about what that would look like?

Dr. Justin Chen: I think in our field, we're really shifting, as you said to culturally sensitive or culturally humble care, as opposed to culturally competent, which the culturally competent care implies there is some sort of body of knowledge that you can just learn and then you're competent in it as though you were doing an abdominal exam. This is very different, a sensitivity, humility, these are attitudes or stances towards care, which really encourages the clinician to maintain a stance that is open in relation to aspects of the patient's cultural identity that are important to that patient. And so I think this approach is characterized by the ability to express respect and a lack of superiority with regards to the patient's culture, and also recognizing I think the tremendous role that culture plays in behavior, in what's acceptable and also in labeling symptoms and seeking care.

So while it's not possible for any clinician to learn every aspect of every culture, I think it's possible for training programs to train clinicians, to be respectful of cultural differences, the role that they play and how you would negotiate those in treatment. I think there's been a ton of research on this in well, as the psychiatrist and anthropologist Arthur Kleinman has said, psychiatry has to learn from anthropology that culture does much more than shape illness as an experience, it shapes the very way that we conceive of illness.

Sarah Alger: Are there any successes that you can point to in intervention so far for graduate students?

Dr. Justin Chen: This isn't intervention per se, I think there's a lot of different things that schools have done. So for instance, I think getting students integrated more into the community, we have this view that you come here and you should just avail yourself of all the resources that are available. But actually I saw a really interesting case in Appalachian State University, where this was at the undergraduate level, football was a very important part of the campus culture. And so you might say, well, why don't the Chinese students just come to those games? And they just weren't coming. So what this university chose to do was to actually have the students come down to the football field, learn about the rules of the game, and then actually put on uniforms and play a game. And so it was just a very different idea of approach and engagement, like inclusion and invitation.

And the other thing that I found very striking, there was a study that found that international students who reported a more functional relationship with their advisors were less likely to report having an emotional or stress-related problem in the past year and also less likely to use counseling services. So it's not that every student needs or would even benefit from going into individual counseling or therapy, just like our center has said, we don't want to necessarily put everyone into treatment. There can be other things that really help. I think having a trusted person you can talk to in a position of power, like an advisor or an international student advisor, and these are all things that can be productive.

Sarah Alger: Thank you, Dr. Chen.

Dr. Justin Chen: My pleasure.

Sarah Alger: What about the larger political picture? We'll speak with an expert in graduate education about what the Trump administration has meant for these foreign students.

Dr. Justin Chen: Coming up next on the Proto Podcast brought to you by Massachusetts General Hospital.

Sarah Alger: In a Senate hearing in 2018, before the judiciary subcommittee, Deputy Assistant Secretary of State Edward Ramotowski announced that a new set of guidelines would limit student visas in certain advanced STEM fields, such as robotics and high-tech manufacturing. The goal was to keep secrets from leaving the country, but the target population was very specific. Senator Dick Durbin.

Dick Durbin: It's my understanding this just applies to Chinese graduate students, is that correct?

Speaker 5: It applies to certain Chinese nationals. Yes, sir.

Dick Durbin: So how will you ensure that students who do not pose a threat are not punished simply because they have to be Chinese?

Sarah Alger: The Senator pointed out that Chinese immigrants had faced a long history of being unfairly singled out in this country. The Chinese Exclusion Act of 1882 banned all Chinese workers from entering the country, separating hundreds of thousands from their families. It was the first such restriction that focused on a specific nation or ethnicity. The law stayed on the books for more than 60 years.

Dr. Justin Chen: While students are free to apply for another one-year visa every year, the policy has several practical effects. Students with these shorter visas will pay more in fees and spend a greater portion of their lives, uncertain about their long-term status, making it harder to plot their careers or attend international conferences. According to US higher education officials, it also makes it more difficult to plan visits to family.

Sarah Alger: The law has also caused concern for institutions of higher education who are trying to gauge what this means for the most numerous sector of their graduate school population. Proto editor Jason Anthony discussed this with Dr. Jenny Lee. Dr. Lee is a professor at the Center for the Study of Higher Education at the University of Arizona, and has served as the chair of the council of international higher education.

Jason Anthony: Dr. Lee, welcome. And thank you for joining us today.

Dr. Jenny Lee: Thank you for having me.

Jason Anthony: So what role do Chinese students play in the graduate landscape of the United States?

Dr. Jenny Lee: Well, the US is the dominant host for the world's international students. And China is the leading center among all countries in the world comprising about a third of our million international students. Like any other international students, students across the world are seeking a US education because of its high quality, high ranking, high prestige, but they also do offer quite a bit to us. They are bringing in considerable funds, roughly about $42 billion, two thirds of that coming from outside of the US. So there's the financial benefits. They're considerable contributors to our scientific research production, whether they be graduate students, faculty, post-docs that there are numerous ways that they also help US universities stay at the top, through the contributions they make in science.

Jason Anthony: So there has been some concern about these Chinese graduate students coming and taking American research away. But some of your recent work looks at that picture being a little more complicated. I wonder if you could talk about that.

Dr. Jenny Lee: So the political rhetoric is very one-sided and it's a zero sum idea that the US has everything to offer and the Chinese are coming here to take it away from us. I mean, that's essentially the rhetoric that is used to justify proposals and policies to limit collaboration with Chinese students, scholars and scientists. When in actuality, if we actually look at the shared publications between the US and China, first of all, I should mention that these are the two leading collaborators of the world, that when we look at the number of scientific publications produced by two countries, the US and China are on top. However, when we look at who is funding these studies, the vast majority is coming from China. When we look at first authorship, and these are the lead researchers of these projects, they are Chinese authors.

Jason Anthony: I guess, I'd love to talk about one specific incident that's happened in this very tense climate. There was a recent episode at Duke University at the medical school there, and it's something that you've written about. And I wonder if you could tell us a little about it.

Dr. Jenny Lee: There was a particular case that received considerable media attention, where faculty member, who was in an administrative role had sent an email out to their Chinese students, indicating that it's not to their benefit to speak their native language in social spaces because of negative stereotypes about speaking Chinese. I do believe that this person had the best of intentions and believing to protect these students from potential harm or negative stereotyping, but really this did send a negative message about the Chinese language and whether or not international students can freely express their own culture and languages without being negatively stereotyped. As a result of that incident, that person has since resigned, but this is not an isolated incident, we've also seen similar cases at the University of Maryland, at University of Kansas and other institutions where faculty are making blanket negative statements about Chinese students in ways that are really sending a message that you are not welcome here.

Jason Anthony: So you've written a fascinating essay about the "China threat at universities" and you'll present this at the NAFSA: Association of International Educators. You write that the National Institutes of Health has put extra pressure on grant recipients to cite any international funding and some data sharing, and that the penalties for these new policies, which have been pushed by a Republican controlled Senate, have disproportionately fallen on Chinese researchers. Now, the effect of these new regulations and penalties has led three Chinese American scientific societies to publish an open letter in Science Magazine. They say that the targeting of ethnically Chinese researchers and students by the NIH and by the FBI is tantamount to racial profiling. Now, given that that's an environment in medical research and in scientific research communities added to this Duke incident, how does that affect students who are just coming here and trying to get a good education? How does that affect their mental health? How does that affect their ability to learn and maybe their future career prospects?

Dr. Jenny Lee: International students are now feeling that they are under the microscope and being stereotyped as potential spies for the Chinese government. When in actuality, by and large, the vast majority of these students are seeking the better education and life for themselves and their families. Just in much the same way that international students all over the world, regardless of the origins are coming to the US to do.

Jason Anthony: So clearly, China is a valuable research partner for the United States, partner going back decades. And even though the optic right now of the trade war, that this is not a partnership, but a competition there are important contributions that each country makes to the other's research. What can institutes of higher education do to preserve that relationship and in fact, to preserve the role that these students play?

Dr. Jenny Lee: Well, I think it's important that while there might be security concerns, and again, we're talking about isolated incidents that have become very newsworthy. I think it's also important for institutions not to suddenly jump on this fear-mongering in suspecting that every Chinese national that is coming through the university doors is a potential spy for the Chinese government. I think that there's some potential hysteria around this idea. And I think that institutions as institutions of higher learning, universities should be playing an important role and actually educating the public and dismantling these kinds of myths. Celebrating the contributions that Chinese scientists have offered, the kind of research that is being conducted that wouldn't be conducted otherwise without these important bilateral partnerships.

Jason Anthony: Dr. Lee, thank you so much for joining us today. I really appreciate our conversation.

Dr. Jenny Lee: Thank you for having me.

Sarah Alger: That was Proto's editor, Jason Anthony speaking with Dr. Jenny Lee of the Center for the Study of Higher Education at the University of Arizona. So Dr. Chen you've studied the topic of how discrimination can play into a learning environment. What have you found?

Dr. Justin Chen: I think discrimination can cause harm in several different ways. I think what we just heard from Dr. Lee illustrates one of the stereotypes that Asian students, whether international not are subject to these negative stereotypes about being perpetual foreigners, spies, not patriotic or robotic. And the effect of these types of prejudices are obvious. There's been a lot of research on negative and harmful stereotypes and impact on self-esteem, psychiatric symptoms, et cetera. But I think one thing we haven't talked to as much about is the negative impact of so-called positive stereotypes, ideas that Asian students are all good at math and science and just uniformly successful. This feeds into what's known as the model minority myth where basically Asian students have no problems and they just do well and succeed.

I think the problem with all stereotypes is they're dehumanizing, so it's really not taking into account the individual experience of each person. And I think with these so-called positive stereotypes, given the pressures that already exist to excel and achieve among these populations, I think needing to live up to these stereotypes can actually further inhibit disclosure of problems like we were talking about before and inhibit help seeking.

Sarah Alger: So two questions, how can students respond to incidents like the one at Duke in a way that promotes their mental wellness and how can institutions head off such incidents in the first place?

Dr. Justin Chen: I think students should have forums or avenues to discuss and respond to these types of events. I mean, I think, sometimes groups may not exist on campus yet, and that's certainly been the case at some of the local universities in Boston that I've worked with. And I think having just a place to process and then also speak out about the effects of these things can be very helpful. I think racial discrimination is hurtful because it just shames people for some attribute of themselves that's different and can't be changed. And the other thing is that discrimination can then become internalized as internalized racism, internalized homophobia. Students may feel they did something wrong just by being who they are and I think that's tremendously destructive. So empowering them to stand together and have other student groups together condemn these types of harmful behaviors can combat the helplessness that might otherwise result.

In terms of heading off these types of events to begin with I think, again, it's just about education setting standards for people who do interact with students. The intention was probably positive in the case of the Duke incident that was described, the person was trying to help protect students, but may not have recognized the impact of those words, what they were going to have on the student.

Sarah Alger: What changes can help Chinese students and US educational institutions work better together?

Dr. Justin Chen: This reminds me of psychotherapy, it's like trying to bridge two different worldviews or cultures, whether it's cross-culturally from China, the US or just two people in a relationship. So while it's true that the students are coming to the US to get a US education they need to adapt to the US way of doing things. I think the educational institutions could also try to meet the students part way. It's not easy to break into a totally different culture and I think in working with Chinese international students and also schools, one thing that comes up is that the Chinese students don't feel that they have a forum to express their own unique contributions, their sense of expertise or their strengths, it's often a more deficit based perspective. They don't speak the language, they don't get the jokes and so after a certain point, it can be hard to keep trying.

And so I think facilitating ways to actually have the two sides get to know each other better and see each other as people, I think those would be great. And they don't always have to be language-based, I'm a big believer that there could be activities or music, sports, other things, physical activities that can bridge the gap.

Sarah Alger: To end on a somewhat positive note, a number of universities have recently issued statements in support of their Chinese scholars and researchers. And in August, a larger coalition signed a joint statement, asking the government to "tread carefully" on this issue in order to promote "free and open academic inquiry in exchange" is that a step in the right direction?

Dr. Justin Chen: I think it is. I think as with other areas of injustice, it's really important for those who have a voice and some power to speak out on behalf of those who can't. I think that this country is made great by the incredible juxtaposition and mingling of all types of different people who bring diverse backgrounds, viewpoints, and talents to bear on tackling really difficult challenges. And so I think at their best, universities should be champions of this ideal.

Sarah Alger: Dr. Chen, thank you for joining us today. And listeners, thank you for tuning in to the Proto podcast.

Dr. Justin Chen: Thank you for having me. Today's podcast was produced by Emily Silber, Bradley Klein and Jason Anthony.

Sarah Alger: Thanks also to our technical directors, Adam Keller and Chelsea Andes. Subscribe to the Proto Podcast on iTunes and Stitcher and follow us on Facebook, Twitter, and Instagram. See you next time.