**Albert Chang Interview**Learn how campuses can prepare for the mental health crisis and learn about vaccine clarity.

**AS** [00:00:00] For today's podcast, it's a pleasure to have Albert Chang, M.D. MPH. He is the medical director for the Student Health Center at the University of California, Irvine, where he is responsible for helping for helping to maintain the health of student and staff populations, prevent illness and injury, and promote healthy living for the people of the community. Prior to UCI, he was a pediatrician and patient advocate for nearly 20 years, including serving as a regional medical director of AltaMed Health Services of Community Clinics in Orange County, California. As a regional medical director at AltaMed, Dr. Chang was responsible for providing the clinical oversight for seven primary care clinics, managing the medical directors at each site, advocating for the needs of over 60 medical providers, and supporting the delivery of care to over sixty five thousand patients. As an active member of the Medical Leadership Council, and serving as the chair for many committees and project teams, he has worked very closely with the Clinical Operations Quality Department, medical management, health, education and marketing teams to ensure the success of many programs and projects within the Orange County clinics. He obtained his medical degree and MPH from Boston University School of Medicine, trained in pediatrics at the Children's Hospital of Orange County, also known as CHOC, and completed a preventive medicine residency at UCLA. Welcome to the Student Success podcast, Dr. Chang.

**Albert Chang** [00:01:29] Thank you very much. Pleasure to be here. Truly.

**AS** [00:01:31] I like to start podcast's asking some questions about hobbies or if you have any talents or special superpowers that you wouldn't mind sharing.

**Albert Chang** [00:01:43] Well, I disclose the superpowers, but that would out me, so I can't talk about that. And I'm a pretty quirky guy. You just just ask my wife. But the one thing that we kind of commented on before we started was I'm pretty much a Star Wars fan, you know, being a kid growing up in the 70s and 80s. But one character in particular, I'm a really big Boba Fett fan. So Boba Fett is one of the characters very iconic. And if this was a video podcast, you'd see not only the artwork on the wall behind me, but I've got racks and shelves. I've probably got over five hundred to seven hundred Boba Fett items and actually have them on display at the Orange County Health or Fair a couple of years ago as one of the collection items there. So this is something that started once again in childhood with small little figures here and there, probably through medical school and residency of all places, you know, just as a way to get away, to collect things. And then through eBay, I've developed my collection. And it's just something that's kind of a fun thing. With the most recent Star Wars stories and especially a series called The Mandalorian, I'm very happy to say that my investment from years ago is coming out doing quite well. So hopefully, hopefully the Star Wars thing kind of keeps going in. My retirement is banking on it,

**AS** [00:03:00] Although the podcast is audio only, we do see each other during the podcast and your wall is just filled with Boba Fett drawings and, oh my gosh, you have so much Star Wars paraphernalia. It's beautiful. So yes, the Mandalorian, I'm sure you were super excited about his return.

**Albert Chang** [00:03:18] Yeah, pretty cool series. Pretty cool show. So the writing's really turned around. Looking forward to it.

**AS** [00:03:24] Thank you for sharing that one. I'd like to give a shout out to to the university. Actually, a lot of people don't know that the University of California, Irvine, has been ranked top in the nation for social mobility. It's been number one, the Forbes list of America's best value colleges. It was the first public university to reach number one on Money magazine's annual list of best colleges in the nation. It's number two for diversity. That's beautiful. And The New York Times, it's been ranked number one in the nation for doing the most for the American dream. I do have a bias. I really like UCI, my kids have gone through UCI. Those indicators that I just mentioned I think are really meaningful compared to many of the other rankings out there. That and this is just my opinion, that really don't tell much, that just tell more about exclusivity. And so I really, really appreciate UCI. I think also I'll call it that. I'll call it customer service. I think the customer service was amazing. And so that's how we met is during a pandemic. We just had so many questions. And you, as you are the medical director for the university, and you took time to meet with us and to educate us, there was so much uncertainty. And so, and your background, as a pediatrician, such a kind hearted demeanor about you, that's really appreciated. I said, oh, my gosh, I got to have you in the podcast again. Thank you so much.

**AS** [00:04:53] So let's get started. What we're seeing, in my view, is a mental health crisis. We have plenty of indicators of that. Indicators of abuse increased, and that has an impact on on the people who are being abused. We're seeing the impact of isolation. We're just seeing so many indicators. People are just tired, too, of this pandemic. And I think it's going to be really pronounced. We're really going to see it as we come back. And a question I have for you starting first from the student perspective, as they come back, as many of them are dealing especially those who are disproportionately impacted populations who have been hit hard by all of this. What tips could you provide for for students to deal with this mental health crisis? And then a follow up question after that will be, what can the institution do? But let's first talk about students. Your thoughts.

**Albert Chang** [00:05:52] Well, you know, even to go back a little bit further, I thank you for talking a bit about my background. So I worked in community medicine out federally qualified health centers for many years. I was the ultimate group and underserve uninsured patient populations with a lot of need and resource. And I didn't, I made a transition to student health and in a way, I felt like I was turning my back on community medicine. I needed a transition from my own personal life, but I'm finding that many of the families and the communities that I was taking care of as a clinician, as a medical director and pediatrician we're seeing here on our campus. So that's a diversity that is really our kind of sharing of issues and concerns. Now, when I was at AltaMed, so even though I was a pediatrician, as a medical director, we had to tackle some of the most challenging health topics, especially with a challenging population. So obesity, heart disease, diabetes out of control, polypharmacy with people that really had barriers to understanding access that some of the disparities that we were trying to break down and it was challenging. But once again, that best work transitioning to student health, I had to think about a few different things. So one thing for me was as a pediatrician, I would no longer be seeing young children. So we we provide care to our students. So it's typically an 18 to 30 year old population are undergraduates or graduate students, but no more babies, no more school aged children. I thought I'd miss that, but I'm truly enjoying providing care to our young adults. This is essentially Pediatrics 2.0 for me. So my last 20 years as a clinician, I've spent working with parents, working with families, working with children as they transition through their ages and stages of development, just crossing fingers that we will develop healthy adults, letting them embark out into their careers to be successful and strong and happy individuals. I'm catching that now in student health. I'm seeinghow good of a job did we do. How are we doing now? And working to empower our students to really take charge, take care of their own lives with hopefully the tools that we've kind of planted as parents and as clinicians early on. And that's why I think the more the time given to the parents of our students, I think is critical, because my mantra throughout my life as a pediatrician has always been that your child is the most prized possession you as a parent have in the world and for you to entrust the care of your child to me is the most trusting bond in a relationship I think you can have. And when I speak to the parents of our students on our campus, that is the continued responsibility and accountability that I have. You've entrusted your child to come to our campus, to go to to be seen at our student health center. We have to make sure things are going well.

**Albert Chang** [00:08:43] Now, getting back to the mental health issue, because the population is a younger population, eighteen to twenty five. And for sure, we have students that have chronic diseases and other medical issues. If you were to ask me prior to covid what my biggest concern was as a mental health issue, mental health across the board. So not only because of the stresses and the challenges of getting into a highly competitive school, but staying in this highly competitive school, dealing with the challenges of going through young adulthood, making choices, living on your own. About 20 percent of our students are international students. So now you're dealing with a culture change of acclimating to a completely new environment academically, socially, health care. There are sometimes, we'll see patients and students from across the globe. It's their first time being in a doctor's office like ours. And it's a completely alien experience. And sometimes the stresses and the challenges are obvious to us. And so our goal for sure has been to support a culture not only in our student health center, but on our campus as a whole that stresses challenges. Transitions are a part of normal life, identifying them individually first and then taking advanced. Resources on campus.

**Albert Chang** [00:10:03] I'll start with our student health center. So our student health center has probably on any given day, 10 to 12 of our providers, physicians typically. But we also have a nurse practitioners and physicians assistants which provide basic primary care. But a part of basic primary care is also making sure mental health, behavioral health is all in check. We've all trained ourselves to ask, well, how are things going? So your ankle is a bit swollen. You've got this rash on your arm. But how are things going overall? How are your classes? How is life? How is your social life? And these are little cues to just kind of pick up on any potential issues or concerns might happen. And I'll share with you all. It's not uncommon that I'll have a student come in for one concern, cough, a sore throat, something else, and will kind of get to a point where they're breaking down in tears because as they talked about all of the pressures that are coming down on them from courses, from school, from family sometimes or from friends and relationships, it's very realistic. And it's something that we're all keeping an eye out for. We're very fortunate that our student health center to have a psychiatry department onsite. So we have three psychiatrists that provide care. We have two social workers that provide care, and that's out of our student health center. So we do our bit of screening. If we identify something that's there and we provide the support and we direct to our student health center psychiatry team that's needed other resources on campus for our students in case they're not quite comfortable coming to the student health center or it's not a screen that we're able to do. We have a wonderful counseling center on campus as well. It's separate from our student health center, but it's a very supportive department and they've got, I think, over 20 to 30 counselors, trained and licensed counselors to provide service and care to our students that are going through challenges in different areas of need. On top of that, and we, of course, work very closely with them, it's a collaborative effort. We have a lot of shared patients to kind of follow what may make sure that we're all paying that best attention. Another level of support for our students is our Center for Student Wellness and Health Promotion. This is like the Health Promotion or Health Education Office on campus, and it's led by a wonderful team of peer educators. So these are students that are working alongside their peers to help support issues such as alcohol, tobacco issues and concerns, LGBT concerns and issues, HIV testing, STD testing, relationship building or just stress relief in general. You know, a lot has changed with covid, but prior to covered, this was an open and still is an open department. But prior we would have students stopping by. There's fliers that, are counselors. There are peer groups and workshops available. There's a distress area where you can go if you just need to get away to kind of calm yourself down. We have a nutritionist that works with us that's a shared staff member out of the wellness center. So talking about healthy eating, talking about cooking and shopping that right best way. So a lot of research on campus. So I wanted to point out the three that I have mentioned so far, Student Health Center for one, the counseling center for two, and the Center for Student Wellness and Health Promotion, number three. So we all work collaborating. This is our kind of mental health behavioral health trifecta, I like to call it. We are the team that goes forward. Sometimes we'll see issues that students will bring up in our student center, that perhaps the counseling center or health promotion is not seen. And so we'll share with them from a clinical level what things to kind of keep an eye on. Our health promotion office is fantastic because of their peer educators. They're kind of keeping their finger on the pulse of what the students are feeling out in the community, how remote learning has impacted mental health and behavioral health. So they're giving us on the ground, kind of in the trenches, in the dorms kind of perspective. And then, of course, our counselors are helping us all the time with a lot of the resources. A lot of our counseling and support has been remotely as well. So online through remote means. And so they're supporting us with what's working best and keeping us on task. In addition to our three departments, nearly every department on campus has a level of support when identifying high stress issues, behavioral health issues that become an issue or a concern. So our disability services center for sure, is an area that supports students and their needs. Even our recreation centers, our food service centers, all these other areas on campus are also adept, kind of identifying, then redirecting to one of our our services. In a way I'll share with you. It gets to be a bit confusing. You know, U.S. has a big campus and there are a lot of programs. So how do you know which one to access? So one of our goals is to make sure they're directed lines and channels. There's a way to easily navigate what is needed for our students.

**AS** [00:14:57] So you just reinforce why UCI is such a wonderful university. It makes all these investments looking at it from the the student perspective, if they see that there is an issue, that there's a mental health issue. What do you recommend for that student? How to deal with it? We know that at UCI they can go to the wonderful centers also because so many people who listen to this podcast who are across higher ed are incapable of having similar investments, what can the student do to to get help? And then given everything that UCI does, for campuses that don't have those kind of investments or can't even at the faculty level, because they get they're the ones who are actually students the most are there. We're not asking them to be psychiatrists or anything like that. But what role, no matter how small, can they play in helping students when they return? And again, I feel like this mental health issue is going to be really pronounced when we all get back.

**Albert Chang** [00:15:59] Yeah, great question. And it's a challenging answer because not one size does not fit all for as many people that are out there. There are many different variations of mental health and behavioral health issues. And then the biggest challenge for sure is how to connect them to a resource that they feel comfortable with. I think as a clinician, one of the biggest challenges about mental health and especially with adult medicine, is that it really is upon the individual to go seek out that help to kind of if if whatever therapies are involved, whatever medications are involved, and to follow suit with whatever recommendations are there. So complying with that kind of treatment plan that's there and in getting someone to be comfortable in opening up and sharing and not resorting back or running away. So when you ask about the resources that are there, so definitely on a clinical level through your own personal health care provider, your primary care doctor should be that first and foremost counselor is going directly peer groups for sure. But for the individual, for our students and even for faculty and staff looking into the community to see what else is out and available. We spoke a little bit before about resources through the county. So our Orange County health care agency has a very robust mental health service team. And they have resources through a community based programs that can be accessible to our residents in Orange County from multiple different levels, does not work for everybody, but for some people in some populations that might be that resource. You know, if nothing else, Covid has shown us that technology can be a strong support in health care. We have transformed much of our primary care service from my face-to-face, in person clinical experience to telehealth. And this has made access to primary care, appropriate primary care, much more easily accessible. But for mental health, this is a boom. Now, not everyone feels comfortable speaking to a counselor over their phone, but for those that are a bit more isolated, have challenges with transportation or kind of need to find that right best fit. The telehealth options for mental health and behavioral health are booming right now. And even though it's an early stage, we're seeing some great feedback from different programs that can work with different approaches to provide a variety of populations, incuding artificial inteligence. So you would think that speaking to an actual other individual or a clinical professional would be that best we're finding for certain groups and populations working with A.I. models. I was reading up on a study from the military that PTSD, working with A.I. sometimes works better in some ways and you would think you're talking to this kind of model. But there are options that are out there. And for me, the beauty is let's explore this. Let's take a look to see what's available. Let's find out what works for those individuals. But the challenge is providing access. So I think we can expand our minds to look at what's out there and available. We can share with our students, our peers, our family, our friends to what might be available. But ultimately, they've got to take that first step to kind of move forward and go to whatever that is. And then on a very basic level, and I say this to my students all the time, if they're not quite comfortable yet going to psychiatry or counseling or therapy, just having someone within their lives or a group of people within their lives that they can be open and speak to, I'll take a little bit of a divergence here. Also, being Asian American, Chinese American, growing up here, but having parents that are from China and Taiwan, mental health is still quite a stigma in a lot of many of the Asian cultures. So when I speak to my mom about we've got a wonderful team of psychiatrists at UCI, she's like, well, you know, psychiatry. What do they really need? Psychiatry. You just work hard, get good grades, make your parents proud of you and life is good. Well, there are a lot of issues. There are a lot of barriers. There are a lot of hurdles that many of our students coming from other countries, and I just use Asia as an example because that's something that I'm aware of. But we have to make mental health and behavioral health support and services easily digestible, easily accepted and avoiding stigma where we can, but educating and directing support. So there's opportunity for innovation, there's opportunity for shared communication. But getting back to where it was before, if you've got friends, if you've got a church, if you've got other groups that can support you, that you can reach out to, I think that's a first step. That kind of first step, and you mentioned this before, know many students look up to faculty and there's a mentorship step that can be developed through there. And undoubtedly our faculty will be encountering students that have issues and concerns and knowing the resources, appropriate resources, kind of boundaries. Boundary issues are a big thing on college campuses for sure. But then at what level does information need to be brought to providers or clinicians? So I speak to faculty at times without specific detail about the but about the resources that they can share with the students. So they can say Dr. Chang is one of our doctors are Dr. Diaz and Dr. Yamada at our center. They can really provide you support. So awareness about the resources either on your campus, but not if not on your campus, within your community, and if it seems to be becoming more and more of an issue, bringing it to your department, some other we know for sure that the graduate student population is under a higher level of stress than our undergraduates. And so our graduate school divisions have resources. Counselors specific for departments and professors and faculty should be very aware and it should be a proactive communication that the moment something starts coming up or even as you're doing orientation to new students, you can say we've got this program or this person to be a resource should things become a bit more worrisome or things start to get a bit out of hand. So being aware of resources, being comfortable with them yourself, and then going through the practice of sharing them and following up as appropriate.

**AS** [00:22:16] So perhaps a strategy coming into the fall, because I know, for example, some community colleges made an investment in telehealth, specifically mental health, but the usage was really low from the students, I think, we're coming out of Mental Health Awareness Month, that we need something like that returning in the fall, whether it's on the website. One of the things that faculty talk about when they're describing the syllabus, that counselors have fliers, that we need to have that very proactive awareness of mental health and addressing. I don't know. I don't have the answer. How do you address the stigma? Maybe it's through orientation. Why do you think of that? Just having a really robust strategy, communication strategy for, by the way, it's not just for students. Faculty are going to be dealing with mental health issues as well. You know, they are people who. So it seems like that would be strategy.

**Albert Chang** [00:23:20] Oh, yeah. I think and we've we've definitely taken advantage of orientation of parents, week of opportunities to share early on, proactive. That's I think that's one of the keys is being proactive. And just like you mentioned, speaking easily in transparency about issues that will come up, not if something happens that you're feeling stressed out about, but it will happen. And when it happens, following up with this, I try to I try to link like physical medical care and health with mental behavioral care and health all the time. You can't really be healthy and one without being healthy and the other. So when I speak to my students and they're coming in and talking about the cough or the rash or the twisted ankle, I ensure I make sure to speak about the mental health, because even though that ankle is healing, if they're so stressed that they're not sleeping well or they're eating poorly or they can focus on their exams, they're not going to be successful as students. And so the whole dynamic and how it feeds into itself is I think is critical for them to understand in one of the advantages we have is on a campus. One of the givens is that all of our students are here for their education and they're either paying a lot or they're working hard or both right. To to do well in their education. And so sometimes that will be an incentive and a motivator. So for a student that isn't even aware of their own behaviors being a detriment to what's going on, a discussion about how improved sleep and how improved nutrition and how regular routine exercise and activity and socialization will actually and evidence based. Actually help them do well with their academic performance on top of everything else, and so for some of the senses are very analytical, you have to kind of break it down and you take it as a stepwise measure. Going back to what you mentioned before about the opportunities early on. So we have discussions and orientations with our students on multiple levels. It's overwhelming. If you think back to I went to college in Santa Cruz five hours away from home, completely alien environment, exciting, but frightening. At the same time, there's a barrage of information. But when there's a theme of support and there are access to resources and their avenues of individuals that help out, I think that's that key level. I spoke about the cultural challenges before. So there's like a cultural kind of acclimation work group that happens with their international student center. It's about living in the US, living in California, getting a driver's license, doing this. Just some basics in our student health team has really integrated with that team to speak about clinical care once again. So all of our students that you see, I have insurance, they may not all have our insurance plan, but for those that do. How do you call to make an appointment? What are the kind of things that you might want to call to make an appointment about? When do you want to speak to a nurse? When must you speak to a provider? And even though we don't say necessarily psychiatric issues, we always weave in if things seem like they're getting a bit off or it's more challenging for you to get to your courses or you're not feeling as healthy. Sleep, nutrition, exercise, basic habits come and speak to us. And we've identified I've personally identified some of our young students that come to the US from another country, start dating, start living on their own, and they don't know they have an eating disorder. But when you break it down and you look at their patterns of behavior and what they're what they're saying and what they're doing, there's an early eating disorder that's kind of generating. And it's our opportunity to catch those directors and get get those students to the right resource and understand some of the feelings, some of the pressures, some of the some of the drives that are pushing them to behave certain ways and address that sooner than later. I would I would think it would be wonderful to have a bit of this is terminology. Right. But mental health, behavioral health kind of resource in perspective for each of our orientations across campus. So with academic departments, with student affairs, with for sure, within housing, within the housing units. And then another opportunity is direct education to our advisors, our resident advisors that are students themselves, that are sometimes the first contact that a student in stress has. So what is the research? What are the trainings that they have? And we through covid, have built a strong relationship with our housing team through our student center. And our goal is to continue with regular updates so that everyone in the housing units knows of resources, knows how to support, and then most critically knows how to identify crisis and get that to the right place.

**AS** [00:28:13] I love this idea of integration. As colleges return and higher ed, most of the operations is all done with committees and being able to, especially at smaller institutions that have been kind of fall under the equity committee structure where you have an Umoja program, Puente program, Veterans program programs that that help disproportionately impacted people. If the leaders of all those programs have this united front around mental health, I think that would be a tremendous positive strategy because institutions of higher they survive on enrollment. And let's be realistic. If students are coming back and if we're not proactive, we're going to lose them. You're going to have enrollment issues. That's just a reality. I don't want to make it about dollars and cents, but if you're an institution, you need to pay for all these services and your students are the ones who bring in the the revenue. And if we don't, if we're not proactive, if we just come back and we're all we're finally back, we're so happy now and we just really forget about this underlying tidal wave that's coming up, it's going to hit enrollment, it's going to hurt students. It's going to hurt everybody. And the other strategy that I love and I hope those that listen to the podcast, especially those that work with disabled student services or counseling, counseling, that you ask questions. You don't probe too much, but you want to get out that mental health aspect of what's going on. I love that. I almost wish there was like a two or three question prompt that colleges can provide for them to. Because they're indicators, right, indicators of what might be happening,

**Albert Chang** [00:30:05] Yeah, along those lines, it's challenging because how many times have we asked a question of someone be like, Oh man. And they say, let me tell you about what's going on. You know, like I should never have asked. OK, now this is a very, but this is a very important issue when you ask about mental health. So I'll use another example. If you saw a coworker or just anyone walking by with a bleeding gash on their head, you might just as a caring a citizen to say, hey, are you OK? Do you need any help? And then they can answer, yes, I'm going to my doctor or this is what's going on. I've got a little bit of an injury. People have asked me what's going on. So we are relatively comfortable asking about kind of physical indications of health concerns that even though I'm not a surgeon, even though I'm not whatever, but we can then say, well, here's an E.R., here's an urgent care, there's a concern the challenges with mental health issues are typically hidden. They're not obvious. But you can sense from certain behaviors someone starts crying in front of you out of nowhere. There's probably something that's going on now, asking questions. If you're doing OK, do you need something? You can get yourself into a bit of a pickle when you don't know where to refer. And then all of a sudden you have become that primary contact and you've got to be somewhere. And your learning is never ask that person about what's going on. So I think our kind of goal then is to know about the resources so that we can say, you know what, there's a graduate student advisor who is this is his number. He's phenomenal. He has hours. He has opened our office hours every Monday, Wednesday and Friday. You can get him to speak to him, say that I sent you or there's a website. This is what's great for you to use. Go ahead. You can use your student health plan to kind of get on to it, or many students have found it helpful or go by this. So if we're aware of the research that we can refer to, then sometimes we're more comfortable asking initial questions. Now, this is where it also gets tricky as of as a clinician, as a physician, as the medical director, I have been privy to a lot of personal health information for our students, for sure. For staff and faculty. Not at all. And, you know, there's the line of, well, is it appropriate to ask someone how they're doing? Might they think you're my coworker? Why should you know about what I'm going through? That's, we're asking in an appropriate way. That's we're asking not as an accusation. Covid, for example. You're coughing. Do you have Covid? Why aren't you wearing a mask? What the heck is wrong with you? Don't you know there's a pandemic going on versus being empathetic, being of concern and care. Other situations sometimes that comes up in a work environment. We talked about work a little bit is when is it appropriate to report something that you hear say to a supervisor? When does H.R. get involved, when you employee assistance programs come into play? I mean, this is all very real. Everything that we spoke about with the stress and challenges for a student population echoes true for work as well, sometimes even more so. Students are relatively short term what their college experience. So two to four to six years you can be working in a work environment that is challenging for decades and really not getting out of it. So everything that we're saying here, we're really focusing on the student experience. But I feel the resources, the communications, the proactive engagement needs to happen for faculty and staff members as well. And it all comes from leadership. I do believe that leaders that are that do see this as a priority, that are comfortable being transparent, that realize that we cannot do everything but the importance of doing something, that we can promote the communications, we can promote the focus on programs, that we can get feedback from what's working and staying on top of it. Because as you state, your society hinges on the mental health of all of our citizens. And if we start kind of falling apart, especially in the university, if we see that the challenges start to affect just day to day performance and even just students staying enrolled, it's going to have a larger impact. And so it's our obligation and opportunity to do something about it sooner than later.

**AS** [00:34:30] It's such a complicated issue. It's so nuanced. That's why having a plan and being proactive is going to be really critical. This integration, multiple leaders from the campus coming together and actually they already have, most campuses have a plan, some kind of strategic plan or equity plan, some kind of plan. But now just put that mental health lens on it. I think it's the intentionality around this that is going to pay a lot of dividends in the long run, I feel.

**AS** [00:35:00] Switching gears, I wanted to talk to you about some vaccine clarity. Because there's still a lot of confusion. I feel one of the things, I think myth number one I wanted to discuss with you is that and I have to be honest, it's just me. I was really disappointed in the CDC when a few weeks ago they came out and said, it's safe if you're vaccinated. You don't have to worry about it safe. And I was thinking to myself, well. The kids that haven't been vaccinated yet, they're not safe. We don't know who's vaccinated and who's not, and those who are immune compromised, they're not safe. We don't have a card that says you've been vaccinated. Well, we do but it's not an official thing. Right. So I was just so disappointed. And I think one of the things that people think about is that if they're vaccinated, they cannot get it. And that's just not true. If you're vaccinated, you can. The key here is the vaccine will ensure that you won't land in a hospital with a tube, but you can still get sick.

**Albert Chang** [00:36:15] OK, yeah, so the frustrations that you feel that much of our our population, our society feels, you know, in a weird way, it's even magnified for us as physicians and clinicians. And it's tough because we hinge on what CDC and then beyond CDC, the World Health Organization, or who, as some people call it, right. Are our kind of resources for gathering data, information, compiling best as best as possible, and then sharing that from a public health perspective, from an epidemiologic perspective, that we can make smart decisions on our behaviors. I think you recall over a year ago, I never knew that masks, masks and masking would be so controversial. But there were confusing messages coming out of CDC. It was much of it was evidence based, though, because we did not know initially if this was an airborne spread, a droplet spread or your contacts spread because of those criteria. There's some different levels of protection and masking that works. But for the community, it just sends out a confusing message. My biggest concern is you rarely ever are blanket statements truly appropriate to cover all populations. You will always have your exception. I like to break it down this way when I talk to our our faculty and staff members and our students. When you hear about something coming from CDC, I'm saying CDC is kind of the top level with input from WHO so to cover what's going on in the US in general. Well, that still needs to be kind of disseminated down and dissected on a state level. So our state level is the California Department of Public Health. So then, and they're also waiting to see what CDC says because then they take the information. But California Department of Public Health needs to process it for each and every one of our counties because the demographics, the population, the numbers are in, the behaviors are very different per county. So then CDC then says per county, these are the recommendations and regulations. So even CDC, even though CDC said this, L.A. County, you guys got to do this because you're kind of high on this level. Yucai, you can do that because you're kind of in a different region, in a different area. Riverside, San Diego, accordingly. And then it gets to the public health departments per county. So our Orange County health care agency takes what the CDC says takes what it says for the state and then applies it to our specific population here in our cities. So Irvine can do this, Santa Ana can do that. I live in SEAL Beach. You can do this. And it's all about data gathering kind of feedback. And this is where it's so difficult because when a blanket statement is made up top, but then a more specific statement is made on a county level, then the citizens kind of go, what the heck? CDC just told me, I don't need to wear a mask that I can do this and this, but you kind of need to filter that down. So even though it's good to hear what's happening at the top, we need to truly listen to what's happening at the local level. So what is happening on a county level that's really impacting us in each of our individual areas? And let's break it down even further out. So the University of California has its own guidelines for its campuses. And then even beyond that, UCI has different guidelines that are different than the county that are different than Cal State Fullerton, that are different than UCLA because of other unique differences. So following guidelines and following best guidelines will always kind of be a challenge. The one thing that I'm hoping we take away from as a society is recognizing the threat of infectious diseases. You know, there have always this is what's interesting for me to there have always been people I've known that have been quote unquote, germophobia, and they are sterilizing everything. And they were wearing masks years ago. And then to have people that are just taking a bite out of this, sniffling that from the fridge, eating without a whim, having washed hands and I don't know how long. And then you've got everything with everyone that's in between. We're definitely seeing now that being a bit germophobia is probably on the safe level, not meaning that we have to live in bubbles, but just being aware of where potential exposure lies for you and I are like. Two years ago, if we had the financial means, we could be anywhere on the planet, probably within twenty four to forty eight hours without anyone asking, so when was your last vaccination? Do you have a fever right now. Are you immune compromised or is your father who you're traveling with in his 80s, immune compromised. We weren't really I mean, there was assumption that you're taking care of yourself, but we weren't really paying that close attention to how things might spread. Now, I don't want to compromise, like traveling is awesome. I'm ready to go to Hawaii in about a month myself. Right. But being smarter about exposure. And that starts from waking up every morning seeing how you feel. If you've got any indication that you may be sick, do not going to work. Do not go around others. Do not going to class and get yourself checked out doesn't mean you got to go to the hospital. Doesn't mean you have to go to the E.R. or even talk to your doctor, for that matter. But maybe you stay home, you take care of yourself, make sure you're over your symptoms before you go out into public. And our society hasn't really pushed that. How many times have we showed up to work sick? And it was expected that you'd just get there and you do what you have to do? And how many people are you exposing in that process? How many of our students have gone into classrooms? And there's someone for sure coughing and sneezing their head off in the back of the class, or for that matter, in Trader Joe's, someone that's picking up the the Brussels sprouts next to you just cough and you're like, what the heck is going on? And I don't want to be suspicious and kind of point fingers at those individuals. But I think the responsibilities for each and every one of us to know when we're not feeling well, what are potential exposures. And it is kind of taught us about masking, about social distancing, about considering exposure for sure to our our generations that are older, but also to our children. And one opportunity also has been remote work. So how many of us are going to be able to benefit from working remotely where we're minimizing exposures and working on hybrid schedules, things like that. So getting back just to the basic question of the vaccine, you know, the information that you hear about it, I'm sure is being updated. For example, when the concern came out with the Johnson & Johnson vaccine and just be sure they pulled it off to investigate every issue moving forward. This was a sign to me that they're doing their best to do all those right best things. But when statements are made and they seem a bit broad, look to see locally are the recommendations, but ultimately do what you are comfortable with as an individual. Even if the mask mandates go off, there is no one that can prevent you from wearing a mask, going into work, going to shop and going to class. I mean, this is your own personal health choice. You know, being aware of what you need to do is the first key step.

**AS** [00:43:47] Thank you for that. I think a big game changer would be, and we've heard, I think it's from Pfizer that they might have a pill in the fall for treatment. So people who are immune compromised.

**Albert Chang** [00:44:01] Right.

**AS** [00:44:02] Because if you have the vaccine and you're immune compromised and you get covid and you can get really sick, but now there's a treatment that would be the game changer. I think a lot of people who heard CDC say there's no way I'm going to discontinue wearing my mask because I still don't want to get super sick. Yeah, I'm not going to die. That's probably the chances are very low. And I have a tube down my throat, but I just don't want to get so sick. And wearing a mask is still and I hope campuses don't say, yeah, return and you can go and clap when you're vaccinated. Don't worry. I just hope that's not the case because again, I don't think they're interpreting the guidelines at the local level, as I'm sure they're looking at it more of at all this is what CDC says. We need to apply that without actually looking at the local level. But anyway, do you feel that the treatment, that would be a game changer? And two, do you have any sense of timing? Is that is that realistic, that it might actually happen this year or maybe it might take longer?

**Albert Chang** [00:45:05] Yeah. So treatment for sure will be a game changer when we're looking at fatalities. Right. So it's hard to conceive that over half a million fatalities within our country in this last 12 months. You know, I like I don't like to, but I sometimes compare it to like influenza. Influenza this year, almost like minimal, minimal fatalities. And we typically, in any given flu season will accept twenty thousand to forty thousand fatalities. That's kind of our previous best effort. That's like, well, we'll accept twenty to forty thousand deaths from the very old, the very young, the immune compromised this year for sure. The levels come down because we've been socially distanced, we've been quarantining, we've been isolating. And when we prevent the spread of covid, we've been preventing the spread of flu. And we actually had an influenza mandate on campus to kind of make sure that we were covering ourselves in that way. And then the big the big thing once again, is getting back to the vaccine question. No vaccine is one hundred percent. But the coverage that you will get. The vaccination has recovered, for sure, has shown keeping people out of hospitals or the level of disease has been lower. I'm sure that's going to be changing. Millions of doses have gone out. We'll have responses, reactions. We'll have cleaner data on how to follow it moving forward. So vaccination makes sense, but with variants, with mutations, with different ranges of what can happen with potential waning immunity. So this is another point. So we may we most likely will be getting covid booster shots sometime in the future. I'm asking our experts about this all the time, just so I have a schedule in my mind for our students when we might want to kind of have them all kind of come in. Is it a year out? Is it two years out? Data will show us the virus will tell us what that is. But smart coverage, clear coverage, safe coverage. But you can't just rely on vaccination. That's why I bring up influenza, influenza covid. There's always some virus or bacteria out there trying to survive. And unfortunately, their survival means infecting us. And one of the consequences of severe infection is the fatality. So this is where infection prevention across the board makes us smarter as individuals identifying illness and getting treatment for sure sooner than later. But even when knocking on wood that the covid vaccines continue to do a wonderful job to prevent surge and spread of this disease, there's always going to be something else around the corner that we'll have to stay on top of. A big part of the challenge of answering questions is it's only been a year, about a year and a half. So even though a lot of research is going on, we're having to wait and watch and see how this virus behaves. The wonderful thing is there are so many labs that are on top of it to make sure if there's a twist, if there's a turn, what goes on early on. And one of the things that my family said to me when the vaccines became available, they said, you know, I'm just not too sure. It's just so fast. I'm just not too sure if I can trust this vaccination. And I get it for sure. So I've lived in vaccinations for my whole career as a pediatrician, you know, and there have been a lot of new vaccinations. So chicken pox, vaccinations, HPV for cervical cancer. And sometimes there's a question about how much is it just the manufacturers trying to push a product because, you know, because the financial incentive and gains that's there. So my personal perspective is for sure. So all of the all of the biotech firms were scrambling to get their vaccinations up front first. I mean, Pfizer, who will ever forget the words Pfizer and Moderna at this point, they're linked with covid. So they had everything to gain. And there was a financial backing that allowed us to escalate service. And the world of research was pretty much focusing on covid as a virus, but in the same way, they had everything to lose if they cut corners, if they didn't follow regulations and guidelines, if they compromised their their quality measures in developing this vaccine, because there are dozens and dozens of other manufacturers that cannot wait for the guys on the top to be knocked down because they want to step up. So if I was Pfizer or Moderna, you have to cover your backside like crazy because you can be known as the vaccine company that brought covid under control, or you can be known as that vaccine company that cause X number of fatalities because you did not check your vaccine first. And that's been in the history. There have been other vaccines and other medications that have been taken off of the market because it's not always the manufacturer's fault. But if you're compromising, if you're skimping, if you're cutting corners to do something fast rather than do something of quality, you're going to get found out. And you've got dozens of competitors that are reviewing your research and data every single day, not intentionally to knock you down, but to push themselves forward. So there's this kind of a scientific development competition, but quality kind of is that transparent standard that's there. So it doesn't always provide that comfort. And there's still, just to be open and honest, they're still making revenue for sure of their products. But the compromised quality, I can't see it being there. There's too much at risk if they were to cut corners.

**AS** [00:50:45] That's a good point. Thank you. I know that a year is not a long time. And the data I'm learning something new every day. For example, one shot of Pfizer. Now we're learning to cover you something like 80 percent or so. Eighty six percent. So the second shot brings it up to over ninety. So why do you want a second shot now? We're learning. Well, why? Because of the UK and India variants. The latest, as I try my best to keep up with all of this, is that there are only at roughly 30 to 40 percent effective with those variants. But when you do take your second shot. So let me let me explan that again. So if you took your first shot of of Pfizer and you get the UK or the India, it's only about 30 something percent effective. But if you do take your second shot, it's significant. It goes back to like 80. What's the latest information that you have about the variance and the vaccines, especially the J&J? Because so many people took that one and now it's been, you see it on social media, and there's jokes about it that if you have that one, you're screwed. To set the record straight on kind of where we currently at, knowing that the data may change down the road. Where are we at right now? What variants and the vaccine?

**Albert Chang** [00:52:08] Yeah, so my in once again, I look locally, so I meet with the Orange County Health Care Agency almost weekly now. And I I've always had a strong relationship with their director for communicable diseases. And so thus far, right now, the good news for us in Orange County is that Pfizer, Moderna, Johnson and Johnson have had very strong coverage rates, even with other variants that have come in. So there have been a few other variants that have come in here and there. But in those individuals, the protection is quite good. There is. So but that's more to come as there is more variance. And that's the challenge here also is to know which variant is going on requires a different level of testing called sequencing. So now you've got not just covid is present, you've got a sequence which covid virus is present. And through the different covid sequences, you can see this is a unique variant. This is a South American variant, whatever that is. But that testing is becoming more accessible and more routine so that we can better track the good news. For me, as of my most recent conversation with the Orange County health care agency, is that from those VACC, those individuals that were vaccinated and were positive. So there is breakthrough positivity even with vaccination. At the point I had my last discussion, zero hospitalizations of those individuals. So even though you're still getting it, it's a much more controlled way. Now, this is early and this may be just with certain populations of that infection still happens to an eighty five year old. It may be different, right. But it seems like we've got a good protection with the three that we have on hand here. It is early in the game. It is early in the game because there may continue to be adjustment, adaption, mutation, things going on in that way. When you were speaking before also about the immune compromised and you know, there's herd immunity is a term that's put out there about a certain percentage of individuals are protected. If you look at ourselves as islands and you look at the virus is having to have hop from one island to another. If the islands are all congregated closely together, easy for the virus to pass. But if upon vaccination, we're being separated so there are fewer individuals that are susceptible, it's a lot tougher for the vaccine to move from one to the other. So it dies in between. So there are these theories about percentage of individuals. If you have a certain community that's covered with a certain percentage, are you protecting those that are immunocompromised or those that are not vaccinated or vulnerable? Still very early to tell, but through kind of through virology in general. That's where we're looking. That's what we're going towards. One of the things for me that I think has been a huge plus, even with the controversy, even with the confusion, is that vaccines are being discussed daily on top levels of leadership throughout not health care, but through business, through politics, through media, like we're as a country. And not everyone's in full alignment. But the discussion is open. This discussion is clear. You know more about vaccines. And I know and I applaud you. You're doing your research. You're looking into the data. You're wanting to be confident and convinced of what's going on. And even though there are anti vaccinators and there are all kind of theories and thoughts about vaccination to do the research, to look, to invest in convincing yourself and making your personal decision is a huge step forward rather than just being too dangerous. It's not for me. It's going to cause X, Y and Z. There's still information out there. So I love the fact that we're discussing. And will we convince everybody? Not at all. Can we convince enough to get to coverage and protection, hopefully, if we're not quite there, so this is kind of that bell curve again, where these people will always do what you want to do. These people will never do what you want to do. It's these people that are on the fringe. We've got to speak to them and to make sure that things are safe there, make sure that we convey information and do the research and do the studies and come up with innovations to provide safe protection, to provide safe environments, to provide what we're trying to do on our campus, somewhere where you can go focus, work and learn with all success behind you.

**AS** [00:56:48] Thank you so much for participating in the podcast. Just to wrap things up, I think it was great for people to learn about what UCI offers. So thank you for unpacking that, because when other institutions can, I'm sure they can go to the website. I have show notes and all of the resources will be there, but it'll allow them to see what kind of how to resource allocate funding. The way that, obviously is UCI is a major university compared to, let's say, a community college, but I think there's some things that a smaller community college, which has primarily disproportionately impacted student populations. And that's why I'm so passionate about this, making sure that we do this right, because so many over this personally impact student populations have all sorts of health issues. They're immune compromised. It's just we want to make sure that they're safe. So learning from what UCI is doing is wonderful. And how much of that can they mimic. I think the second thing that came out of the mental health discussion was just how a proactive strategy coming into the fall because this is going to hit so many people when in-person pronounced again, everybody's happy that I know some campuses are opening up 50 percent, 60 percent. Some are almost one hundred percent with some capacity issues. And everybody, understandably, they're so happy because they think, oh, we're getting close to normal, but we just still have to use common sense when we return and really think about this mental health aspect. So we talked about some strategies for that and then obviously vaccines. Thank you so much for at least confirming what I've been saying, which is if you have the vaccine, you can still get it. We should, I think it's just the kind thing to do, to watch for those vulnerable populations, even though they might be vaccinated. By the way, a lot of them are not. And their kids and we've seen some kids, they get really sick and we've had fatalities. So thank you for confirming that about the vaccine. And then because you're right, where we're in, this is what, it usually takes, but sometimes 10, 15, 20 years, right, time to really understand how vaccines work, we're trying to do this in a year. Our vaccine immunity may wane. We might need boosters. We need a treatment. There's light at the end of the tunnel, but we're not out of the woods yet. Are there any last parting words that you have for dinner?

**Albert Chang** [00:59:28] I've been so proud of our UCI students because it's been tough and I think they've done a wonderful job to do what's right, to make smart choices, to be accountable for not only the health of themselves, but the health of their classmates, their families and those in their community. And I think that echoes strong from many other campuses. You know, college campuses are a target for the media. Sometimes, you know, you'll hear about certain pockets of certain universities that are partying too much. But I think for our campuses here, we're really taking it seriously and also that our our faculty and staff have worked in a collaboration that's been phenomenal. Sometimes you need this common enemy to bring ourselves together. And so we've been able to work with housing, work with food service, work with our faculty partners to kind of do what's right. Sometimes you have to put some of the egos to the side and look at your own students, your staff, your family your personal health, and kind of get to a point that you can do what's right. So I've been impressed by not only the collaboration on campus, we've been fortunate to to have our leadership direct us and provide us the the ability to do testing and to do to be able to give vaccines and to quarantine, isolate our students that right this way. So, you know, it really is all of us working hard together to provide this best case. And it's been a wonderful learning experience for me to see what's going on. And that's where it's been an honor for me to speak to you today. It's all about sharing the message and getting others to kind of start exploring for their campuses and university what they can do, where the innovation might lie, and then sharing that with others. And so that's what I really appreciate what you've developed here as a platform, as a medium. And I look forward to continue partnerships and working together. Thank you very much.

**AS** [01:01:14] This is the way, brother.

**Albert Chang** [01:01:15] This is the way. This is the way.