Seth Robinson: Welcome to GameChangers, the show that's about playing by your own rules when it comes to your career. Join us as we speak with people who have taken the road less travelled and found their niche. I'm your host, Seth Robinson.

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Seth Robinson: Today we're joined by Wei Sue and Shing Sheung, two co-founders of Navi Medical Technologies, a company that's working to help save lives of prematurely born babies. They're part of a superheroesque team who have capitalized on their interdisciplinary experience to create cutting edge technology. Shing, Wei, thank you for joining us.

Shing Sheung: Thanks, Seth.

Wei Sue: Thanks for having us.

Shing Sheung: It's great to be here.

Seth Robinson: Great. Thank you so much. So, I guess to start, I was wondering if you could tell us a little bit about Navi, the startup that you guys are both co-founders of.

Shing Sheung: Okay, sure. Well, we're a startup company. We formed at the University of Melbourne, actually. So, my background's in biomedical engineering. Wei did her MBA at the Melbourne Business School, and we did a course together called Bio Design Innovation in 2016. We were the first cohort to be accepted into the Bio Design Innovation course. Actually, the first in Australia. So, the course was actually modelled in Stanford in the U.S., but this model has been replicated in different areas in the world. We were part
of the first course ever to be offered in Australia. So it was a really exciting time for us to all be put together.

Seth Robinson: That's incredible.

Shing Sheung: So, we had engineers like myself. So we're a team of six co-founders. There's two biomedical engineering students that we started in this course together, Wei and two other MBAs students, and our chief medical officer is a doctor at the Royal Women's Hospital. The six of us with backgrounds in biomedical engineering, business, and medical came together to commercialize a medical device.

Shing Sheung: So we worked in this course for nine months, worked together. We spent around half the time actually identifying important problems that need to be solved specifically in the clinical area. And one problem that kept coming up was this problem in paediatric medicine. And that was when babies are born too early, especially those who are premature, they often required drugs and nutrients to be delivered to them to grow up to be nice and healthy. And this is usually done through the baby's umbilical cord, but when a baby's born too early, they don't have that umbilical access anymore. So once they're out of the mother's womb, doctors currently insert kind of like a substitute umbilical cord called a catheter, which is a thin flexible tube into the baby's belly button, so doctors can continue to deliver drugs and nutrients through this tube.

Shing Sheung: The problem with this procedure is that it's pretty tricky to get the tip of this tube into the correct spot. In fact, around half of the time the, the tip of this tube is in the wrong location, which could mean some serious consequences to babies. So with this problem in mind, we set out to find a solution. So our current solution is to create a medical device accessory to catheters to provide a real-time, accurate tip tracking of the catheter so that doctor can insert the catheter into the correct location in the initial attempt and to improve outcomes for babies, reduce extra exposure, and also to improve clinical efficiency. So we've come a long way since we all formed.

Seth Robinson: Absolutely, yeah.

Shing Sheung: We've raised a bit of funding recently. Engineering's going full speed ahead, and we're looking to do another raise at the end of the year. So it's all pretty exciting times.

Seth Robinson: That's incredibly exciting.

Shing Sheung: And we all started at the University of Melbourne and here we are today.

Seth Robinson: Here we are. It sounds like you're dealing with a startup, but at the same time you're engineering quite a fine device, it sounds like. So it sounds like there are serious challenges that come with both parts of that project. You're trying to raise capital and basically get this business out there into the world at the same time as your engineering this product. Is that were having a really kind of multidisciplinary team is valuable?
Shing Sheung: Yeah, it certainly helps. One question that we get all the time from advisors is, "What are you working on right now? What are your biggest challenges?" And I usually respond with, "I know we're doing product development, we're doing regulatory work, we're raising money, we're working on IP." And our advisors are like, "Whoa, whoa, whoa, slow down. What are your biggest challenges?" But everything's a big challenge to us. Everything's kind of happening at the same time. So it certainly helps to have a multidisciplinary team.

Wei Sue: In larger organizations you tend to have experts working on regulatory issues, working on engineering issues, working on clinical issues and just working on... and you have dedicated resources for finance or even human resources, accounting, for example. But the difference between a startup and a large, more established company is that you wear all hats at the same time. And even if you are not sort of like a specialist or an expert in say, Christiane, our chief medical officer, she's got 30 plus years of clinical experience as a senior neonatologist. She's the one who is obviously going to be the expert and have the final say, if you can, around sort of medical and clinical issues. Shing and Mubin, obviously coming from a biomedical engineering background, they're going to be the ones with the engineering expertise.

Wei Sue: But to some extent the rest of us all still need some level of understanding of these issues because there's only six of us. Someone has to chip in in some way. And so I would say that's the biggest difference between, say, professional experience in a more established sort of organization versus a startup. And I think a multidisciplinary team couldn't be more important in this case.

Shing Sheung: And that's what I love about my job. You know, I get to hang around with MBAs, people who are really experienced in business. The other MBAs kind of joke around and saying, "You know, Shing, you did a master of engineering degree, but you've pretty much got a half an MBA already, just from hanging out with us." I've started thinking in two by twos and decision trees and stuff like that. So I love what I do. It's great to learn from people like Wei and Alex and Brad from the company.

Seth Robinson: And you did the Bachelor of Commerce before your engineering, that's correct?

Shing Sheung: Mm-hmm (affirmative).

Seth Robinson: Yeah, and Wei, you actually did Bachelor of Science in botany, is that correct?

Wei Sue: I did my honours thesis in the School of Botany, but it was heavily statistics-based. It was just such an unusual thing for it to be awarded through the School of Botany. It's like a very, very little known fact of me.

Seth Robinson: Well, when I found that out and then saw that you'd gone on to do your MBA, I thought that was such an interesting kind of progression. And in the
same, doing commerce onto engineering, people do, but it's not exactly the norm. So I guess not only is your team really interdisciplinary, but as individuals you have quite versatile experience as well.

Wei Sue: And I think that's kind of one of the reasons why we work so well together and I would credit some of our, sort of the progress we've made to date to that in some ways, because of the versatility and the sort of all aroundness that we find across the team and even within each team member. That's actually been quite critical in helping us bond as a team and just having those common understandings. Or like, for of what I mean by that very simply, very, very, very simply, it's like Shing with a Bachelor of Commerce background is able to understand some of the more sort of when we talk finance or accounting stuff. He's like, "Yeah, I get it," kind of thing.

Wei Sue: Whereas me, coming from a science background, no matter how many years ago that might be, I can kind of relate that with some of the stuff Christiane talks about, about stuff that happens in babies, physiological changes and these P waves and QRS waves that these engineers talk about all the time. I can kind of relate, and that sort of shared understanding is very important as a team.

Seth Robinson: So Shing, before the interview, you actually mentioned to me that you’re now full time at Navi, but you weren’t prior to that?

Shing Sheung: So I've been full time for a bit over a year now. So there's two full-timers currently in the company. The remaining co-founders are part time and contributing where they can. Our chief engineer is looking to come on full time as well. So we're definitely looking to scale up how many hours we're looking to put into the company. But I graduated from my engineering degree last year with the full intention of taking a job in a large consulting firm or engineering company. But what actually happened was while I was working on Navi, our startup, in parallel, after my graduation, we actually got an offer to go to something called the Texas Medical Center Accelerator Program. So that's the number one medical device accelerator in the world, and we got accepted into the program.

Shing Sheung: We put in an application. You know, it’s based in Texas, but we didn’t know much about Texas besides the fact that they have really good barbecue. So we were like, "You know what, let’s just put an application and see how it goes." We got in, we were stoked and a day after my graduation I flew over to Texas to build the company from there. So that was a full-time gig. I politely decline my grad job offer, I packed all my bags, flew to Texas, was in Texas for four months to build the company, and by the end of the program we were making so much momentum that there was no other choice than to continue being full time. And the day after the program finished, I knew that the startup was what I wanted to do until we make it big.

Seth Robinson: Yeah? That's fantastic.

Shing Sheung: So it all just happened from there. Yeah, it was an interesting and really cool journey.
Seth Robinson: Which is kind of what I was thinking about is that it's gone from zero to 100 quite quickly it seems like, and I imagine, Wei, balancing part time work with your other career, and Shing working full time and being quite international, it sounds like. How's the work-life balance been? Has it been incredibly crazy or has it been manageable?

Wei Sue: I think work-life balance, well, for me it's a little bit different. I love hanging out with these guys. So when I work on Navi stuff, that's kind of not really work. It's more like a social thing. And so I love nerding out on some of the things that they talk about and the things that we have to figure out and the decisions we have to make for the startup. So that's all quite enjoyable for me. And that sort of balances my other job out in some ways because in terms of the way I spend my time as well, a lot of the time that I spend on Navi tends to be after hours or on the weekends. All the cofounders are Navi are pretty flexible. Everyone's very... I get along really well with everyone and we tend to do quite a lot of our work in fairly social settings as well, I'd like to think. So all of that sort of balances it out, which is great for me.

Shing Sheung: Yeah, the work-life balance has been interesting. I mean, I love what I do. I haven't met a more passionate group of people than working in startup companies. Everyone loves what they do, and even when we're out, we might be talking about something else over beers, but then we always converge back to our startup, you know? And during my time in Texas, even my housemate was working on two medical device startup companies or biotech startup companies, and all my friends were like PhDs, MBAs, MDs, all in med tech stuff. So even when we go out, we were talking about work as well, kind of. Which, it's kind of good and kind of bad. I think I'm kind of in the medium now where I kind of know what level I'm comfortable with.

Shing Sheung: In the early stages I was like, "Oh yeah, I'm going to talk about Navi stuff the time." And it's all really good and exciting, but sometimes you kind of need a break, I think. Sometimes you just gotta sit back, and even the podcasts I listen to, they're all startup related and it got to a stage where I was like, "Nope, this is... it's great to be passionate, but it's too much. I'm doing this like 100 hours a week. This is way too much. I need to do something else for a change."

Wei Sue: Even the TV shows. Silicon Valley.

Seth Robinson: It sounds like there's been no shortage of interesting experiences that have kind of come along the journey. Where do you both kind of see Navi going in the next few years? Do you have a shared collective vision or do you both have kind of thoughts on it that...

Shing Sheung: Yeah, we see it going big. So one thing that separates us from a lot of other startup companies is that, okay, we're Navi Medical Technologies. We're working on one device for now, but we found that we don't want to stop there. We want to continue making medical innovations that help address the unmet needs of sick children everywhere. We found that a lot of the medical device markets geared towards adults, but children aren't small adults, right? Children and babies, they have very specific anatomical and
physiological problems that don’t mean an adult medical device can just be switched and used for a baby. It doesn’t work that way. And we’ve found that this is an area that we’re all really passionate about. I was a preterm baby myself, so it’s quite a personal problem for me, and we’re really interested in addressing the specific needs for sick children everywhere.

Shing Sheung: So the thing which really separates us from other companies is that we don’t just want to stop with one device and exit. We want to keep addressing these unmet needs in sick children everywhere because, frankly, it’s an area that really needs some innovation.

Wei Sue: And I think one of the differences that, well I guess another difference, that sort of sets us apart is that the reason we’re able to articulate this shared vision is that we’ve had this conversation. One of the things that we constantly hear from advisors and potential investors is, “A group of six co-founders, that sounds like a risk to me.” That’s something we frequently hear. But I think what doesn’t kill you really does make you stronger in some ways. So the reason people think a group of six co-founders is risky is because there’s potential conflicts, potential decisions that can be made. But we’ve got a shared vision. We’ve had those difficult conversations and we’ve come out a better and stronger team for that.

Seth Robinson: Well, I have one more question for each of you, and then I’ll let you go, which is we ask all our guests this. What’s one thing that’s not featured on your resume that you think has helped get you to where you are today?

Shing Sheung: I’ll go first. I would say, so I’m a very passionate tennis player. I love tennis. I’ve been playing it since I was young. I trained a lot during my earlier years and I still play recreationally now. But I played at a pretty high level. Right now, I think back to where I’ve got my personality from. Drive, competitiveness, passion, and I think it traces back to tennis. It taught me how to be competitive. It taught me how to have a structure and training. It taught me how to work in a team, and I think it’s these personality traits that are very internalized for me that sometimes I think back, and I’m like, "Where did I get that from?" And I really think it’s from tennis. So without tennis I probably wouldn’t be here right now.

Seth Robinson: Wei, how about you?

Wei Sue: So I think for me, one of the reasons I kind of find myself in this position where I’m kind of juggling a sort of management consulting job in clean energy and co-founding and sort of still being involved in a medical device startup company is just my eagerness to just want to explore and just want to learn about everything that I can get my hands, that I can access, that the world has to offer. And I think that’s very much a personality trait of mine.

Wei Sue: And I scuba dive a lot and I think the reason I really enjoy that is because it’s, again, it’s exploring the unknown. It’s like the vast ocean and being able to immerse yourself in it literally. There’s this part of me that just really thirsts for knowledge and to find out new things and learn new things and overcome new challenges. And that’s why I think I find myself in this
situation where I'm in trying to do too much almost. But yeah, it's not a bad place to be. I think it keeps things interesting, for sure.

Seth Robinson: Shing, we've spoken briefly before and one of the things that's come up is that you actually are one of Forbes 30 under 30 but you've mentioned that with that there are some problems that come with being a young person working in this particular industry. I was wondering for both of you guys, are there kind of personal challenges as well as the professional that have emerged from working in this space?

Shing Sheung: Well, I think there's benefits and challenges for sure. One of the great benefits of being so young in this industry is that being motivated in this industry really helps attract some of the best mentors and advisors out there. So the fact that I'm a very motivated person, very driven, a lot of people love to help and I think that's something I've really found out.

Shing Sheung: Another thing that's great about being so young in this industry is that, so medicine's a very fast-growing industry, and being a young biomedical engineer, it makes me more adaptable and I can really grow at the industry and to see where the trends are going. It's really exciting to be young.

Shing Sheung: Some of the challenges is that, well, maybe I look too young and it might damage a bit of credibility, but that's not really a huge challenge because I'm surrounded by a couple of more experienced co-founders as myself, Alex, Wei, Brad, Christiane, Mubin, they're all older than me. They've all got more experience than me, and the fact that I'm working with a really strong leadership team kind of helps me and helps the others as well. So there's a couple of benefits and a couple of challenges, but overall it's been pretty positive so far.

Seth Robinson: Awesome. Did you have any challenges you'd like to share, Wei?

Wei Sue: Ouch. That was definitely, yeah, older than him. No, I would say that that's true in any industry to be honest, to be young but eager to learn. I think that's always a benefit in any industry that you're in. Medical devices especially, because it's evolving. The technology developments are evolving so quickly. Part of one, there's a significant component in the Neonav, which is our first product that deals with machine learning, and that area alone is evolving so quickly.

Wei Sue: So to be a young co-founder, relatively, because I'm older, in this space and then trying to use that technique or use that solution and apply it in a medical device setting, it's good because Shing and Mubin are very, very much familiar with that application of that technology, whereas someone who was maybe 20 or 30 years into their career might not be so much.

Seth Robinson: I imagine particularly being a startup as well, you're future facing. You're thinking about what the next 10, 20, 30 years are looking like.

Seth Robinson: Well, Wei Sue, Shing Sheung from Navi Medical Technologies, thank you both so much for joining us. You've been listening to GameChangers. I've
been your host Seth Robinson. GameChangers is produced by Sophie Thomas and recorded by Chris Hatzis.