Duke Surgery chief Resident Oral History Project

Interview with Zhifei (Jeff) Sun

By Justin Barr, 11 May 2020

Keywords: Jeff Sun, Kyla Bennett, Sarah Evans, Dawn Emic, Keri Lunsford, and Vanessa Schroder, Nicole DeRosa, Rice, China, University of Texas Southwestern, Parkland, medical student, couples match, Jina Kim, Patrick Upchurch, Linda Youngwirth, Ehsan Benrashid, Jim Meza, Adam Shoffner, intern JAR, SAR, chief, outcomes, biostatistician, computer programming, Erich Huang, Calypso, KelaHealth, venture capitalist, Morgan Cox, Ralgieh, Asheville, Kadowaki, case postings app, John Migaly, Allan Kirk, Chris Mantyh, colorectal surgery, HIPPA, COVID-19, acute care surgery, ACS

Interviewer: Good afternoon. This is an interview with Dr. Jeff Sun, on the 11th of May, 2020, at Duke Hospital by Justin Barr. Thank you so much for joining us, Jeff. I really appreciate your time. Do you want to start off with a little bit about where you grew up, where you came from, where you went to school, and how you got interested in medicine?

Dr. Jeff Sun: I was born in Beijing. I grew up in Beijing for the first 10 years of my life. I came to the States when I was 10 and lived in Houston. I could elaborate more on everything for the first 20 years of my life, but pretty much, I think the reason I went into medicine was two-fold. I didn't want to be somebody else's employee. My dad was an engineer. My mom was a chemist turned into a research person in Houston. I didn't want to sit in a cubicle and be told what to do.

Also, medicine was a fairly safe route. As long as you're reasonably intelligent, you take some tests, there'll be a job waiting for you where you are reasonably in control of your own livelihood and how you perform. I think those things are probably the key reasons why I liked medicine as a field.

Interviewer: Then went go into undergraduate knowing you wanted to pursue medicine as your career?

Dr. Sun: I did go into pre-med as a freshman, though probably the reasons were not super delineated. Probably, the primary reason was, you can't deny there's the Asian parental pressure. I forget what the acronym is. You can either be a lawyer, doctor, an engineer or an accountant, or something like that. There was some of that pressure, but certainly, I think, at least for me, a big impetus was, I did not want to work for somebody. I know that you always have a boss. Even at home, your wife is your boss, et cetera, but I wanted to be in control of my own life.

It's actually interesting to say being a person coming from China, but I think growing up, I was always very independent. I was an only child. I didn't really believe in listening to somebody for the sake of listening to them because of tradition or whatnot.

Interviewer: Where did you end up going for undergrad?

Dr. Sun: I went to Rice.

Interviewer: What did you study there?

Dr. Sun: It's pretty lame. Biochemistry.

Interviewer: Any particularly influential mentors?

Dr. Sun: No. I think I was pretty immature at the time. I wasn't great at maintaining close work relationships. I think I had a lot of complexes regarding who I was. I was trying to discover myself. I came from a fairly good family in China, with good social standing and stuff. When I came here, I was pretty much bottom of the barrel, super poor. I always performed quite well in primary school and middle school, but then when I got to high school, whether it's teenage years, hormonal X, Y, and Z, I just felt like I was very mediocre.

It didn't help that I was in a school with 40% Asian people, with people showing up with black circles around their eyes on the day of a test and claiming that they didn't study or they forgot to study. There were blatant lies about what they were doing. A super gunners environment. If there's a phrase that describes what my life was like in my teenage years and college years, it was probably “disappointment” or “lack of fulfillment.” I think those would be more accurate phrases. Whereas I felt I was supposed to achieve so much more, but I did not.

Interviewer: When did you learn English in this process?

Dr. Sun: Oh, when I came. I told people I knew 52 words, and 26 of them where the alphabet, when I came at the end of fourth grade.

Interviewer: You just jumped into elementary school and picked it up?

Dr. Sun: Yes. Every immigrant goes through this process. I was in ESL, and then for the first three months of my life, basically, every time you get instructions, you have homework, you didn't understand a single word of it. What people do, and I don't know if that's what everybody did, but what my mom did for me was, essentially, I had a dictionary, and I looked up every single word until I understood each sentence. Then on the weekends, we'd just memorize a dictionary or something like that, but essentially, everything I got, I looked up every single word.

Essentially, it was an intense three months vocabulary training. The school year started in July, August; by the end of the semester, the next semester, I was able to comprehend most things. It also helped that while English was difficult, every other subject was incredibly easy by Chinese standards. It helped that math was kindergarten level when I showed up. That's the honest truth. It was kindergarten level until high school.

Interviewer: It's still impressive to teach yourself English, basically.

Dr. Sun: Well, no, it wasn't myself. It was my mom. It wouldn't have been nearly as effective if my mom didn't sit with me every single weekend.

Interviewer: Did she know English beforehand?

Dr. Sun: She had a scholarship to the UK for a year, and then my aunt, for some reason, was already in the United States, and then she brought my mom over for a job. My mom left on my fifth birthday. I remember it very vividly because after we had my birthday, then we sent her off to the airport. My dad left when I was seven or eight, I think. I grew up with my grandparents. My mom had already worked in an English-speaking environment for five, six years by the time that I had gotten here. She had a steady job, which was good.

Interviewer: Still an impressive transition. You graduated from Rice. Did you go straight to medical school thereafter or did you take time between?

Dr. Sun: No, straight to medical school.

Interviewer: Which medical school did you end up attending?

Dr. Sun: University of Texas Southwestern Medical School in Dallas.

Interviewer: When you went there, did you know you wanted to pursue surgery or were you open to any medical field?

Dr. Sun: I didn't know at the very beginning, but I think quickly, I realized I wanted to do the surgery. It just seemed aligned with what I thought of myself and aligned with the type of medical students that wanted to do surgery, their personalities and whatnot.

Interviewer: What was your surgery clerkship experience like?

Dr. Sun: It was hard, because it was in Parkland. I had vascular at the VA, and then everyone had to do trauma. I guess it was physically challenging because you had to wake up very early. It was the first time in your life where you had to consistently wake up very early. The VA was fairly far from where we lived, so including extra time in terms of driving and whatnot. I'm really grateful for UT Southwestern. It was a

tough education, I think, but we weren't given a lot of slack. The attending took a lot of pride in pulling the students aside to pimp them and teach them.

It requires you to be more thinking on your feet and prepared to answer questions, and being very uncomfortable with being directly asked questions. That was very uncomfortable for me when I started. The interesting thing about medical school was, like I said from before, I always felt like my high school and college experience was marked by one of disappointment. I was always never able to reach the potential that I thought I had, and same thing with medical school. To be honest, Southwestern was a very safety choice for me.

I scored fairly well on the MCAT and had a reasonably good GPA. I didn't have 4.0, but I had close to it at Rice. I didn't have great recommendation letters because I wasn't really good at building working relationships, but I thought I had a reasonable resume. I was interviewed by a lot places. I thought I was going to go, maybe, to one of the Ivy League medical schools. I was interviewed by them, but ultimately rejected by them for whatever reason. Part of it was that I was a poor interviewer. In fact, at one point, somebody asked me why you want to-- I think it was at Chicago -- asked me, "Why did you want to come to this medical school?"

I don't know why I said this, but I said, "Honestly, Chicago's a great city." That was the first thing I said. In 2020, you would've thought I was stupid to say that. A part of me also thinks the interview process is just a dishonest process. You have to say the things that fit into a mold that they believe would fit into what they want.

Interviewer: It's just a script?

Dr. Sun: It's a script. If you know the right answers, you'll get in. If you want to be honest and be yourself-- Unless yourself is what they want -- then you're not going to get in. I remember going to Southwestern, it was such an easy experience because you went in and they just said, "Okay, you're in because your scores are already good enough." You're just automatically in. I didn't even think about Southwestern. It was a safety school. I know that sounds very arrogant. But that was how I felt and I was immature.

Interviewer: Having had that experience at Southwestern and at Parkland as a medical student, and now having supervised medical students here for the last eight year off and on, how do you think the medical student experience here is different from the one that you had?

Dr. Sun: There's just a lot more rules at Duke about what they cannot do.

Interviewer: What the students cannot do?

Dr. Sun: They can't put in foleys. There's all these ancillary staff that watch over them like a hawk and then really discourages, actually actively discourages medical students from participating. Then at the same time, there's not a great structure to

underline what they're supposed to do at any given moment. For example, in the trauma bay at Parkland, the nursing manager for that gave an orientation, and then told exactly, the medical students, "Your job is to cut this. You're supposed to stand here. You do these procedures, and you don't do anything else."

At least there was an understanding, medical students were part of the team that are expected to perform part of the job. Whereas here, it's more of an observership, so how they develop is largely dependent on their own impetus to work. Actually, I'm impressed at some of them. Some of them would show up on day one and feel like they already went to an internship. I don't know how they can do that. Obviously, I couldn't do that. Certainly, I think they're probably slightly disadvantaged when they go into an internship, but I don't think it makes a whole lot of difference, at the end, for the end product.

Interviewer: Did you develop any particularly close mentors when you were at UT Southwestern?

Dr. Sun: Yes. The people who wrote my recommendation letters were fairly close. A transplant surgeon named Juan Arenas.

Interviewer: How do you spell his name?

Dr. Sun: Juan, J-U-A-N. Arenas is A-R-E-N-A-S. Though, I don't know how much this Juan would be on my record…later on I heard he has some #MeToo issue, so he is no longer at Southwestern. Last time I heard, he was in a private practice in Florida or something.

Then the other one is Greg Modrall. M-O-D-R-A-L-L, I think. He trained at Michigan. Guy had a mustache. Yes, just very kind. He seemed like a reasonable person, and he was very kind to me. He wrote a lot of my recommendation letters and said very nice things about me. I'm an introvert, so I'm not very good at developing really close relationships that I see some of the residents have with some of the attendings. I don't go around babysitting other attendings' kids, or dog-sitting, asking about people's pets. I joke around, but it's all work-based joking. Relationships with attendings, it's hard for me to be very personal with them. With that said, I thought those two people were probably my most influential mentors at UT Southwestern.

Interviewer: Would you describe your interview process when you're interviewing for programs? Specifically, what was Duke's reputation at the time. What drew you to Duke eventually? Then you were trying to match in general surgery, correct me if I'm wrong, as a couples match with Jina Kim?

Dr. Sun: Yes.

Interviewer: What was that process like?

Dr. Sun: Yes, it was a very interesting process. I found some success and gained a lot of confidence during medical school. Probably started after—maybe it's just the Asian person in me saying this -- but Step 1 was a huge confidence booster for me. At Southwestern, you took Step 1 before clinical rotations. Having a good Step 1 score builds a lot of confidence. Even if there are things you cannot do, you always just think to yourself, "I've an extremely good Step 1 score." Then you're just like, "It doesn't matter." You really brush off the daily annoyances that happen to you.

Then it also was easy when you are applying for residency; I think programs looked at you very favorably. Having gone through the interview process myself, being the chief resident interviewing finishing medical students, nowadays everyone has really good board scores. Back then, I think having a really good score really got my foot in the door, and I didn't really have to explain a lot. It was like, "Academics, check." It was fairly easy in terms of that.

With that said, because I was couples matching, I was told by almost everybody that, essentially, you're not going to do well, expect the worst. You'll go to a B-minus program at best, you should interview broadly. We took that advice very seriously.

Interviewer: To go back one second, how did you meet Jina? Since you guys weren't at the same school.

Dr. Sun: We met at the Harvard Medical School interview. Again, this was during my time of disappointment. Jina graduated from MIT. She worked at Hopkins, she got a 40 on her MCAT, perfect on the verbal. She was a shoo-in. Her resume competed. Again, this is the same time I told Chicago that I was just there because the city was good.

It was funny because I went to Harvard to interview and then -- this is before the interview process, everyone's going around the table introducing themselves. People were like, "I'm taking a year off. I'm working at the Laos-Cambodia border, helping people with HIV." The other person is, "I'm doing plastic surgery research and looking into wound healing." The other person said, "I'm looking at this immunology in cancer."

Then I had done a lot AP credits in high school, so I came into college as a junior, so I goofed around in college, I graduated a semester early. This is all ridiculous, this is all going to the archives so no one's going to hear this, but I got a BA in biochemistry, bachelor of arts. My parents didn't know this. It was supposed to be a bachelor of science in biochemistry. I was one class short, I think it was physical chemistry or something, but I didn't want to take it, so I just graduated a semester early. Because I came in as a junior, I really didn't need that many credits, and I still did three-and-a-half years, so I really filled in a lot of my time at Rice with PE classes. I did kinesiology, this and that. I did a lot of bullshit classes. I'm still not fit; it didn't do anything, it just wasted time. Looking back, I really wasted a lot of time in college, but what was I saying?

Interviewer: You were introducing yourself at the--

Dr. Sun: Yes, I was introducing myself, and I graduated a semester earlier so I did a bunch of odd jobs. I made some websites for people and I was trying to get a valet job, basically just to make some money. So when it got to me, they asked me what I was doing, I said, "Well, I graduated a semester early, and now I'm just chilling at home." That's what I said in an interview at Harvard Medical School, with the program director of the medical school sitting there. Needless to say, everybody thought I was a dumbass.

To be honest, when I was interviewing, I didn't think I had a chance at Harvard Medical School. I wasn't naive about that. I told Jina that I basically was just honored to have the opportunity, and it was just that. Then frankly, I thought everybody I interviewed with, sans Jina, was very stuck-up. It's like, who the hell goes around telling people they're working on the Burmese border, curing HIV? It's like, shut up, you're not doing anything. I just felt people were very dishonest. We finished our interview, which went just normal I guess, and then we sat down at lunch.

I was the first one to finish. Then some of the other applicants came out and one of them was-- I don't like hyperactive ditzy people -- and one of the girls showed up and they were like, "I'm going to go watch one of their medical student lectures." I was like, "Fuck no, I'm not doing that." All the annoying people left, and then Jina sat down, and she actually laughed at some of my jokes. I thought that was pretty cool, because I had tried to make-- in the group setting, I said some dad jokes' level jokes, and nobody else laughed. Everybody thought I was a dumbass.

I thought all of them were stuck-up, snobby people. I'm sure they're all doing great things at Harvard Medical School. But Jina did laugh and we exchanged-- The funny thing is, we met there, she actually gave me her spam email address. Then we kept in touch, and eventually she gave me her real address and we emailed daily. For a month, I guess, we emailed each other a page long thing every day. We interviewed on February 5th and then talked through the spring and early summer. I went back to China that summer, and then when I came back, she was working in Monterrey, Mexico, which is near Texas.

I took a Greyhound bus from Houston to Monterrey, which was shady by itself, because I crossed the border and then I was on a bus full of Mexicans and the border patrol is like, "What the fuck are you doing here?" I had to explain myself, that I wasn't a drug dealer, drug mule, and then I hung out with her for two weeks in Monterrey. Actually, we decided long-distance probably wasn't a good idea, but by the time medical school rolled around, she's like we got to DTR, we got to define the relationship, why don't we just date? We dated long-distance for four years through medical school. Thankfully, the modern medical school did not require people to be in class. You just watch your lectures online and take a test, and so that's how we did long-distance.

Interviewer: Then four years later you guys are trying to couples match?

Dr. Sun: Yes, we couples matched. They told us we were supposed to go to a B-minus program, and I remember this one guy, his name is Sergio Huerta. he's one of the general surgery attendings at Southwestern. I saw him at a conferences a few years ago, and he told me specifically I was going to go to a B-minus program. "You should try to come to Southwestern, because that's probably the best place you'll go," or something like that. I was heavily discouraged, Basically, no one told me I was going to a good academic program, and I didn't think so either. I applied to 50 programs and then interviewed at 25.

In fact, our schedule was so strenuous-- A lot of people don't realize this if they don't couples match, but putting programs into the match was a very difficult process for a couple, because what the match does is they match you on pairs. You're not being matched individually, so that means you need to define every permutation you can accept for the match to work. For example, if I wanted 20 programs and Jina wanted 20 programs, the total possible combinations is 400. That means, to put into the match there's a possible 400 slots you had to put in. We were somewhat picky people, so not every combination was acceptable.

There are combinations where one person goes unmatched, and the other person goes somewhere. Or there are combinations where it's a really shitty program where we'd rather go do something else than do this, so those are unacceptable combinations. I actually wrote a program to make sure there were no duplicates and sorted 25 times 25. What is that, 625 total? So we ended up having a 450 total rank list, blocked into ideal scenarios where essentially we were both at the same program; somewhat acceptable scenarios, we were at programs close by, like UNC and Duke; less desirable scenarios, we were in the same state or in the same time zone; or really unideal scenarios, one person goes unmatched, we were on different sides of the coast, etc. We were very against not matching, obviously, so that's what we had to go through. I think I still have that list somewhere.

Also, my outlook on life and work changed during medical school as I gained confidence. One thing I learned was, my mistake when I was young, I had a lot of expectations for myself and I failed to meet them, so I was constantly unhappy. When medical school rolled around, I had no expectations. I had no expectations for friends, because they flake out, because my friends would flake out all the time and that's what people do. It's not their fault; people have things to do, but I'd be really upset. Whatever. I didn't get upset anymore. Work life, if it didn't work out, I didn't get upset. Like everything is going to be cool. As long as the general direction is fine, I'm cool with the details not being exactly what I wanted. Even when people told us we were going to go to a B-minus program, ultimately I was fine with that. As long as we go to a program, we're together, it was good, it was going to be fine.

Interviewer: Were you excited to match at Duke, then, when you got that letter?

Dr. Sun: Yes, I was very excited to match at Duke, because Duke-Duke was number one on our rank list. In fact, when that was announced in the match meeting, I hugged Sergio Huerta. I think he was a little dumbfounded, because he didn't know

what to do with me. He was like "This is strange." I did my Sub-I in general surgery. I was very shy, I was introverted. It goes back to, it's hard for me to have really close work relationships in a short period of time. I was actually told by my upper-level resident I'm not going to do as well as I should because of my personality.

He meant this to help me, as sage advice, but looking back it was very insulting. This was said in comparison to my intern at the time, who was an MD from the Caribbean, who was a real estate agent who was very good at selling himself. As an intern, he was good I guess, but in terms of pedigree, he was terrible. I had this one comment saying Southwestern's not a very academic program, whatever. I was not their friend, but I did a reasonably good job. I showed up, I did everything I was supposed to do.

For myself, I didn't think I was the best Sub-I. Purely because I did not need a recommendation letter at that time, so I didn't really care. I went to two surgeries a week. I sent all the MS-IIIs, but I knew how to work the system because I was already MS-IV. I knew all the answers to pimp questions. People pointed at structures, I didn't even need to see where they were pointing. I knew, at this point in the surgery, they were going to do this. I just knew the answer. It seemed like I was a freaking genius. Really, I just knew how to play the game.

But what he said-- everyone was building me up for me not going to be a success. With that said, I had no expectation of where I was going to go. I think that actually helped, because I was going to be fine with whatever outcome it was going to be.

Interviewer: What was Duke's reputation at the time when you matched?

Dr. Sun: I think everyone just talked about it on the student-doctor network[1] and said Duke was malignant. I was ambivalent to that. Southwestern was fairly malignant and they were firing people left and right, too. I didn't really think about that that much. I was not impressed by Duke's interview, though. I came on a really cold day. I think it was in November sometime. Was it snowing or not snowing? I don't remember, but it was a dark day. I stayed at the Brookwood Inn, which is now called Cambria, which is a really shitty hotel, for the future, if you go.

At that time, I didn't think the logistics were very good, to be honest, because there was no direction. The instructions said, "Please go to the HAFS Building." Then you're like, "I don't know where that is." You walk into the hospital, you start asking. I think maybe that was part of their test: people who'd find this building were going to be able to be interviewed. There was no direction. Duke, people said “Decade with Dave” that was the reputation it had. People joked about it. Again, I was told I was never going to match at Duke, so don't even try.

Duke as an undergrad university was very stuck-up. They had the famous six-essay application for undergrad. I thought the same reputation carried for residency, so I

[1] This was a popular website at the time.
File name: Sun Interview.m4a

didn't think much of Duke. Durham was not a good town. I don't care how much you try to sell Durham. At that time, coming from Houston, Dallas, Beijing, Jina from Boston, like what are you going to do? It's not a town. I didn't see anything. You can't convince anybody that this was a bustling town with good food. Are you kidding me? I came from Houston. The interview process was fine. I think I interviewed with [Mitchell] Cox. I think I interviewed with [Trey] Blazer. Definitely interviewed with [Brian] Clary.

I thought the attendings were very nice, and it was a good interview, but I thought the interview process wasn't very structured. I had gone to some other interviews where the coordinator had thought about all the logistics, and so I thought Duke was very mediocre. I didn't do as much research as other people did. I knew some idea what the top programs were, but I didn't really know what exactly made them great.

Interviewer: What year did you end up starting and who was in your intern class?

Dr. Sun: I started in 2012, July 2012. My original intern class was Jina, Patrick Upchurch, who is now an anesthesia resident at Hopkins, Linda Youngwirth, Ehsan Benrashid, Jim Meza, and Adam Shoffner. I had met Adam on an interview. Jim had come from Michigan, so I knew Jim a little bit beforehand. Obviously, I was couples matching with Jina, so I knew half the class when I came in. I liked Adam and I liked Jim, so coming in, I knew those were good people.

Interviewer: What was intern year like for you?

Dr. Sun: It was tough. It was really hard. I thought about quitting multiple times. There were certain people that were very encouraging to me. I think even, especially as an intern, it's really important to encourage interns. My first fellow was Ben Wei. He's a CT surgeon at UAB now. He gave me good compliments when I needed, or gave me a feedback of how I should have presented things. I was on CT for three months, even though I had no desire to be on CT. Back when you carried 60, 70 patient lists routinely, and people were having AFib left and right, people were coding left and right, you're just doing everything. Your sign-out was an hour long from 10 APPs who all want to get out of there. That was CT. Then on general surgery, I hated most of the chiefs I had.

Interviewer: Who were your chiefs?

Dr. Sun: Kyla Bennett, Sarah Evans, Dawn Emic, Keri Lunsford, and Vanessa Schroder, and Nicole DeRosa. Proud of all women in the class graduating Duke Surgery and all, but that class was insane. Especially Kyla Bennett. Kyla Bennett's the type of person that if she came through the trauma bay, I will ask another provider to care for her.

She is a horrible person in every sense of the word. I cannot believe she is a mother to children. Her husband, John Scarborough, was actually very reasonable -- he was assistant program director -- very reasonable guy. I don't know how they're married,

but she was horrible. I think she was pretty smart clinically, but she was very sarcastic. Not in an encouraging way, like, "Ha ha. That's pretty funny." It was a very scathing way.

She put me down so much that at one point I apologized to her for how shitty I was. You destroy somebody's dignity and self-confidence so much that they start to believe that what you were saying was right.

Interviewer: Any fun stories from intern year or was it all misery?

Dr. Sun: There's occasionally fun stuff between interns. It's just so long ago. It's hard to remember. The people in my intern class I liked the most were Patrick Upchurch and then Adam Shoffner. Jim was fine. He was okay. Intern year I like Linda okay. Ehsan didn't really bother me in intern year. Obviously that's going to change, but that was true if you rank people on how I felt about them intern year.

Jina and I were friends with an anesthesia intern named Eun, and then ENT intern named Kevin Choi, and a neurosurgery intern named Kim Hoang. We were really good friends, and we're still good friends now. We used to do a lot of outings, because we had rotations together. I can't remember anything specific, but intern year was fun and it was definitely better because Jina was here. Intern year then was a very different experience than intern year now. Intern year then, we didn't really associate with any upper levels. We didn't associate with any JARs. We were not allowed into the bunker. I had no personal relationship with anybody except for some of the interns.

Interviewer: What were some of the other differences between intern year now and intern year when you did it?

Dr. Sun: There's active encouragement now. The culture has changed drastically in eight years. Part of the reason is that people have changed. There's turnover of people. From the leadership, meaning the chairman changed, from the program director, and from the chief residents. The whole culture as set in Duke Surgery residency comes from the top, and how the residency culture is set is influenced largely by the chief residents. Chief residents now, even the ones that feel a little bit more like they're the boss because they're more senior, regardless of whether they deserve it or not, are still comparatively reasonable. Because how good the culture is now, they don't feel comfortable acting up, so I think that is a huge difference.

Back when I was an intern, even the good ones that were "good and nice" still acted up because they felt very comfortable with throwing tantrums. Even people who didn't give me trouble, like Nicole DeRosa, Keri Lunsford, even Sarah Evans, they were not good people. They routinely belittled people, interns. Which till this day I've never understood. Duke Surgery collects some of the brightest minds in society in the United States, in any field. Highly accomplished, super responsible. Even the ones who are eventually not cut out for surgery, they were a success at some point. They demonstrated that either academically or personally or whatever; they were

able to achieve something that the average person in the United States cannot. I will say, not even United States, in the world. So to treat these interns like children and belittle them, it's insane. You should support them. You should encourage them to succeed. Give them the freedom and the opportunity to succeed and be better than what they were, because those people, if you give them an opportunity, they're going to be there. They're going to get it. They're go-getters. They're executors.

The chiefs I started with were such oppressive people, other than Dawn Emic, who was the only reasonable person. I even hated Sarah Evans, because of several things that she did to me. All of them were such bad people. They were very arrogant. They belittled interns. They created arbitrary rules to segregate interns or lower-level residents from upper-level residents, merely because there was a year difference or whatnot. Very hierarchical for no reason. I get it. If you're better at something, I will listen to you, but not because you're older, not because you're "chief resident" or whatnot. You're not smarter than me. Fuck you. In fact, I would argue I'm smarter than all of them. It was such an unhealthy atmosphere for people to be in at that time. I don't know how anybody who was normal survived through that year.

Interviewer: Was JAR year any better?

Dr. Sun: JAR year was a little bit better because the chiefs had changed. JAR year, physically and mentally was the toughest because you had to quickly transition from just a butler, basically, for chief residents to, well, a butler to attendings. At least you had to present a plan that didn't make you sound like an idiot. Again, it was very chief-dependent because you can have a chief that helps you with consults or whatnot, or you can have a chief that was completely oblivious of what was going on. For whatever reason, at that time it was very okay for chiefs not to know anything that's going on.

Interviewer: Any great stories from JAR year?

Dr. Sun: Stories require a lot of thinking, I'm not like Pappas who can just come up with 10 stories within--

Interviewer: Pappas also tells the same 10 stories every time.

Dr. Sun: That's true. But he has 10 really good stories. I mostly remember bad things, like with Dave Lo, for example. I was working an 18-hour shift and staffing three operative consults at once throughout the day. Then finishing, and then Dave Lo coming into the bunker saying, "Nothing going on." Then I have to be like, "No, there's actually six cases pending," et cetera.

I felt like I got short end of the stick too, because I got the most 2222. It's funny, your perspectives on things change depending on the position that you're in. Every time you get a schedule, you're like, "Oh, who's getting what, who's getting more of 2222, who's getting more of those other rotations?" For me, I got the most 2222 consults and whatever as a JAR. I don't think the people, now knowing how schedules are

made, they don't think about it that much. They're just like, "You're it." Maybe some people that they really hate that much, they'll do something. The vast majority of the time, it's just very lucky. At the time, I felt very discriminated against, because I always say “yes” to a lot of things. I felt like I wanted to be a team player, and so I said yes. For example, there was once and four o'clock rolls by, I had already been on a day of 2222. Kristi Rialon, one of the senior residents at the time, did not want to do night time 2222; she wanted to be on transplant procurement, so she called me at 4:00pm to change shifts with me. I just said yes, and I did a 24-hour 2222. It's insane.

People actually came up to me afterwards like, "You didn't have to say yes to that." I was like, "Honestly, I didn't feel I had much of a choice." Partly, also I wanted to be part of the team. I realized also -- actually this interview is mostly just my philosophy on life and stuff like that.

Cultures also changed where we, as a residency, acknowledged and encouraged teamwork a lot more. When I was a JAR, when I was an intern, because I was a nice guy, I would say yes to things. I was frequently asked to do extra things for the good of the team or whatever without any compensation. It was this idea of, "Hey, you're a ‘team player.’ But that never translated to any benefit. People would say, "Hey, Jeff, you're a good guy for doing this." But it never translated to, "Hey, since you're such a good guy, I'm going to give you a better shift." It was, "Thanks for helping," period. The senior residents, even the nice ones, I just felt like at some point I was being used. This is something Jina and I talked about a lot. We're not divas, but the divas get what they want. Whether that's a reflection of society as a whole or just Duke Surgery, it made me feel I'm very disadvantaged because I was an Asian person who was agreeable to everything.

Whether race played a part in that or not, I think it does. White people don't see it, but sometimes in the ED patients ask where I’m from and then make a comment about how there are too many Asian people in Ivy League schools. Or, I see a patient and the first question they ask me is if I speak English. These are microaggressions that don't occur to white people. The same thing, feeling very comfortable to ask for things and feeling entitled that they can ask for things is a very American, white concept. Growing up in China, you did what you were told for the good of a group, and everyone did that.

Even when I was growing up in primary school, I remember you clean up in your classroom. The kids cleaned up. Each one would have a chore. You had a buddy system, all these systems in place made you part of a group. You can say that's like communism 101 or socialism or whatever, all these derogatory terms. Ultimately, you realize there's some importance of having a group mentality, a teamwork mentality, which is very important in surgery. Surgery is one those things that celebrates both teamwork on paper and in speeches and at the same time, in practice, celebrates the individual a lot more.

Every single talk, we talk about surgery is a team sport. You go into an OR and attending bumps into the medical student, and chuckles and says, "Surgery is a team sport. It's a contact sport. It's a team sport. We're like a military. There's no individual. There's only the team." Then you go onto the ward, there's an attending or chief resident who wants something ridiculous saying, "No, I want it this way. I do it this way because I've seen two cases of this happening." Or at M&M, "This is how I've always done it. Therefore, I made this dumb-ass mistake. I've always done it this way. I'm not going to change this practice because of this mistake. That's how I was trained." There's a lot of, "I," at the same time you're talking about wanting teamwork. There's this paradox that occurs in surgery.

It goes back to culture. I feel like now, eight years later, the culture has changed significantly where we go to the interns houses sometimes, we invite interns to ours. At least for me, I think they feel very comfortable coming up to me, telling whatever is going on. I always felt like if they have a problem, they could just raise it with me. Obviously I feel like, to them, because they are such go-getters, they try to solve problems themselves. They only come to me if there's something where they require my assistance.

I think there's a much better working relationship. Everybody's happier, we joke about X, Y and Z. There's still some level of decorum, at least I think, for the chief residents. Everybody works in close proximity, so it's a huge gossip ground. We try actually very consciously not to talk about lower class people, for bad things, in front of other people. There is still criticism that goes around like, "This resident didn't do this right." We try not to do that in front of their face, and definitely not in front of their peers. I think that's very important. If there's a problem, we'll raise it with them privately.

In fact, this pendulum has swung so far -- earlier this year when we had a problem with one of the interns, the senior residents were essentially deliberating so hard like, "How do we approach this person nicely?" We spent more time deliberating than actually talking to the person. It was more awkward and difficult for us who was trying to give the feedback.

Interviewer: You say that's not the Kyla Bennet approach?

Dr. Sun: No, it was completely different. Then, basically, we were doing this in a bunker and thinking, "How should we say this X, Y and Z" Some of the senior residents were like, "You guys are such pansies. Why don't you guys just bring it out? You just got to be confrontational." This pendulum has swung the other way, where we really care about what we say, how it's conveyed, and how it reflects upon us as leaders in the residency, and how it goes through to the person who is listening. I think that just was not a consideration back then.

Interviewer: You survived your first years and went into the lab?

Dr. Sun: Yes.

Interviewer: What did you end up doing in the lab?

Dr. Sun: Well, when it started I was doing bench top mice work with Dr [Doug] Tyler. It was basically doing isolated limb infusion for mice. Not rats but mice. This is an important distinction because mice are significantly smaller than rats. It was basically trying to learn how to put catheters into a femoral artery and vein from mice under the microscope using tweezers. I did this for three months. I never successfully cannulated both the femoral artery and vein. This was also at the same time that Tyler announced he was leaving to be chairman at UTMB, so I was orphaned. Actually, I didn't know what supposed to doing, so I was lost for a long time.

Actually, I thank Nick Anderson and Doctor [John] Migaly for this, because I went around seeking advice. I started joining outcomes groups, cranking databases. I joined the colorectal group. I partnered with Mohammed Adam, who I'm very grateful to, for essentially showing me the ropes and a lot of things that he did. Then he showed me and the group of residents that was there, Paul Speicher, Brian Gulack, Danny Nussbaum, I'm sure I'm forgetting a bunch of people -- that systematically showed me-- I had never submitted a manuscript before, so they showed me how to successfully write a scientific manuscript, develop a style that's successful, because scientific writing is not the same as essay writing. Develop a rigor in how you, number one, perform analysis, write down the results, present them in a manuscript. Present them in terms of tables and figures, and present them in a packaged product, that's going to give you the best chance of success in terms of publication.

Now, as a reviewer for journals, I see the vast majority of things I have to review are just absolute crap in terms of presentation. Off the bat, I'm looking at these papers, regardless of what they're saying, I don't want to see them because it's barely readable. I think really, what helped me be at least get started on that, I attribute it to that group of residents.

Certainly, the attendings, Dr. Migaly, Dr. Mantyh, Dr. Blazer, all these people who reviewed my papers and give me big directions on how to do stuff and handed me the good questions. My first paper I published with them was actually just like hand-me-down, honestly, from Scarborough and Migaly. It was in *Annals of Surgery.* It was just "Hey, look over this manuscript. Are you okay with this?" It was pure hand-me-down, pure hand-out, but I was very grateful for them to take that leap to let me do that. I think every resident needs a little bit of a jumpstart to get started.

I got started on that. I have a background in computer programming, web design, whatever. I realized very quickly cranking the stats out was 80% programming, 20% stats. Honestly, the statistical methods we use right now are very rudimentary, we're not building crazy models here. We're building linear models, logarithmic models, whatever. Pretty frigging easy. It's just a math equation, one single line. Kindergarten level math, but the vast majority was programming. I realized very quickly that very few people are good at programming, especially the biostatisticians that Duke hires.

I don't know where they're trained, but they don't have a clue about programming. If I had a dartboard with all the stats people and threw a dart in the room, 90% chance their programming level is piss-poor. They don't know good programming etiquette. They don't know how to present data. I created a workflow where you program -- it was essentially a reproducible workflow -- You start with a raw data. I read some of the best practices you're supposed to be doing. I created reusable packages in R, so you're deploying the same code over and over.

Your actual code for each project is small. Your code really is a reflection of what your data analysis plan is, not how you build a table. Basically, I use a very modular concept or framework to try to build this. Then I had a workflow where, essentially, it was very easy for me to create presentation level tables very rapidly from running the code. Whereas the biostatisticians were getting their results in text files. Then I remember one instance where Jina had a table one, a demographics table where she had in her attachments 22 separate two-by-two tables that she was expected to copy-paste into some skeleton. When this biostatistician was asked to change that and produce reasonable work, the biostatistician got mad and was saying, "You're asking too much."

Not only that, their work ethic was piss-poor compared to what we were used to. We're used to, we have a goal, we get it done. A project could take a weekend, and there was at least some preliminary results for somebody to look at. There's a rapid turnaround. We were able to crank out projects very quickly, and people weren't really frustrated by the speed. Honestly, a lot of these projects, they are low hanging fruits, and so there's nothing preventing other from people doing it. First to market is really your best bet to get yourself published.

I was very advantaged in I was very quickly able to pick up the programming, doing it in a very reliable way, and then be able to present a product that other people trusted. I think part of that trust comes from having a presentation that outlines exactly what I did. If you ever work with me, I give you a Word document, essentially, with presentation-ready tables, with the question, the background, the inclusion-exclusion criteria, the grouping, the covariance, the outcome variables. I list out just by bullet points, each, one. It is like you can take this and immediately just write it into a sentence, put it as the methods.

Then for some of the people I care more about, I even interpret the results. If the results were a little weird, I went back and checked the code myself. There wasn't this slow turnaround where the results didn't make sense from the biostatisticians, and you got to go back and wait three more weeks to them do it. I think that workflow really generated a lot of trust. Then I built a lot of collaboration between me and the rest of the residents, so I was able to generate a lot of papers. So I did a lot of stuff on that, especially on rectal cancer. I got some good papers published.

Then in the spring of that year, I got introduced to Erich Huang by Chris Mantyh. He just told me "There's some predictive modeling project." Very vague. Erich Huang, somebody who graduated from Duke Surgery, has a background in bioinformatics.

He went to work for Sages Bionetworks in Seattle, which is a think-tank for bioinformatics. He got recruited back to be a full-time bioinformatics faculty here at Duke. He had a lot of vision in how he thought bioinformatics should work in the health system. I thought he was very visionary. He wrote a preliminary grant for a platform called Calypso, which is a predictive modelling project, taking in NSQIP data or ERAS data and trying to predict surgical complications. I got started on that project.

I think early on, one of the innovations I thought I brought, obviously this is all team-based, was that, it's not enough just to predict patients' risks. You have to do something about them. You have to do something to prevent that. Our hypothesis initially was, people are not getting the best outcomes because they're not adhering to guidelines. They're not pulling the foleys on day one, they're not checking the SSI or something like that. For three, four months, we built predictive models with some actual statistics people, not biostats people, but actual stats people, predictive models.

Then we collaborated with this undergrad who became the MD PhD here, Owen Huang, he's very smart, and we built essentially, an app housing the predictive models, taking in patient risk factors and generating patient outcomes. Actually, with that initial prototype, we won Duke Institute for Health and Innovations Innovation Jam Challenge. We won $50,000 from that. That gave us some initial funding to try to run a pilot study and essentially get some interesting stuff. We actually bought iPads, or rather Microsoft surfaces. Then nothing was connected to the back end, to Epic, so we had to manually put in patient factors, the day before, put into the system. Then we went on rounds for like three months. Basically, it was people showing the rounding team "These are the risk levels for this patient or risk factors for this patient."

Honestly, that was a failure as a pilot. We realized that it's like, "Great, this person is really high risk." Certainly it turned some heads. I remember, Blazer did this ileostomy takedown on this super sick patient who had a bunch of comorbidities. He was predicted to be really high risk, Blazer thought it was going to be a simple case or whatever. He told me, when he saw how risky the patient was, it changed his thinking a little bit. It's interesting, and then when you talk about it on paper, it works. But in practice, nobody changed what they did, because everybody was already doing what was, quote-unquote guideline care. Even if people weren't doing guideline care, if people were high risk, they didn't have a pathway to change what they were going to do. It didn't really change anything. It was like, "Great, he's high risk. Yes, I knew that." That was the response.

In fact, that was a big problem for a long time, for a year or two when we're trying to struggle to do this. During this time, it wasn't just us twiddling our thumbs, we had to go back and forth with a lot of iterations on cleaning data. We got feedback from people like Dr. D'Amico, Dr. Pappas and Dr. Kirk. He's like, "Even if you don't get people to change anything, just displaying the risk is enough. It's important to

assess risk, it's coming down the pipeline as a CMS requirement. You can get, potentially, reimbursement from this. There's commercial incentive for this."

We worked for a year or two even to just get the system connected to the back end of Epic. Basically, we were hitting dead ends left or right. It took a year and basically nothing substantial happened.

Interviewer: At this point, were you back on the wards, or you were still in your research time?

Dr. Sun: I took an extra year, basically, to do this. It really took off after I won that grant. After I won that grant, I took an extra year, essentially, to try to make something of this. Then after the pilots, basically year two and a half, the last six months of my research fellowship, I was finding out the pilot study wasn't showing the results that we wanted because it didn't really make sense. It didn't really show a difference that looking at risk would change people's behavior or change outcomes, but there was this new idea of trying to connect it with interventions.

I don't know, somehow our thinking changed. You've got to be able to create a paradigm where people did something different based on the risk levels. Our biggest example was looking at CHADS-VASC scores for AFib. That was important because, based on your risk level, you can prescribe the patient warfarin, aspirin, or nothing. That means that clinicians had an algorithm now to follow. Calculating CHADS-VASC score was an important part of their practice. We realized that for assessing risk to be important part of the practice, you have to connect it with impactful interventions.

We went through a bunch of interventions, we tried to connect with this program DEFT, which is looking at post-discharge, trying to prevent re-admissions. We looked at SSI, AKI, all these things. This time, off the cuff, we tried to apply for some grants for this thing to keep it going. We applied for an AHRQ grant, which failed. Then we decided to form a company. I guess we're dreaming that this has some commercial value. We formed a company called KelaHealth.

Interviewer: How do you spell that?

Dr. Sun:, KelaHealth. Kela means forecasts in Hawaiian. Erich came up with that, randomly. We couldn't come up with a name. Basically, our business concept is like, "It's not enough to do something. You want to predict your risk, connect it with interventions, change outcomes, and track your outcomes." That's the basic premise. We applied for an NSF STTR grant, and we formed the company. I registered as first CEO, and then we went from there.

Before we got the grant back, I was internally debating to come back [to residency] versus to just go with the company or something like that. Then when the pilot study came back, I was discouraged. Also, I like surgery. Part of my identity was to be a surgeon, so I decided to come back. We had this medical student that started late in

the game with us, Borah Chang. She was never going to go to residency anyway, she was applying for consulting jobs. She was working with Erich on a different project and got brought over by Eric. She was brought into this project. She decided to pursue this full-time as CEO. Later on, after I finished, I transitioned her to be CEO.

During this time while I was CEO for six months, we went on a bunch of pitch meetings. I went to VC meetings, pitched. I was at different firms. Blue Cross Blue Shield has a venture capital firm, there are several others, Piedmont, whatever. Just several firms. I went and did some networking stuff. To be honest, I'm not good at those things, I hate it. We touched base with the Duke Angel network for a long time, we presented to their angels. We almost got funding from them, but it was just meeting with a bunch of people and trying to beg them for money and convince a bunch of people who are not in the space that what we're doing is important.

Part of this experience was creating a lot of FOMO (fear of missing out). At one point, I was talking to a VC whose husband was one of the founders for Oracle. I met her through a presentation I gave for a Machine Learning Conference. It was cool, it was really exciting. Everybody else was doing normal conferences. I was going off talking to VCs and stuff. Then, in last six months, we won the NSF grant for $250,000. That was pretty cool, but I had already decided I was going to come back. With that $250,000 seed funding, which had no equity -- one of the best parts about United States Government is they call themselves America's Seed Fund, which is totally true. They take no equity. If you fail, you fail. $250,000 for phase one STTR. Phase Two, which actually, we recently won, is $1.25 million or something. It's a good chunk of change.

With that money, Borah became CEO and hired some of the people that we did our initial projects with. I had to learn how to work with lawyers and work with the venture department -- I forgot what it's called off the top of my head -- to negotiate licensing the product or licensing the models or an idea out of Duke. Negotiating that and learning how to, I don't know if I did it correctly, start a business. Register in Delaware as a corporation.

Interviewer: The company is still going strong?

Dr. Sun: Yes. The company eventually – we worked a long time, but it's now connected to the back end. Actually, on colorectal – we piloted on colorectal in a few-use uses, actually Mantyh is really into it, it worked reducing AKI re-admission. Part of it is, people who are high risk for re-admission, maybe they should get an earlier phone call or earlier return to the clinic as a way to deter re-admission. For AKIs, routinely, we don't check labs, so maybe those patients should have their labs checked. For SSI, vascular are starting to try to use it for predicting who needs to wound VAC.

For ortho, not here but other places, they're trying to think about how to sort people into getting their surgeries at ASC [ambulatory surgery center] versus a hospital

setting. A lot of private practice ortho practices want to do ASC surgery do not want high-risk patients, and they want an effective way to triage. These are the beginning-use cases for them.

Interviewer: How are you still engaged with the company?

Dr. Sun: Now, on the website, I'm consider a founding advisor. I'm not any of the C-suite levels. Right now I'm just a advisor. I'm still on their grants. It has private equity funding and it's actually applying for series A level. Duke has a contract with KelaHealth, and it's renewing its contract, and the company is maybe getting a contract with someone else too. I think Bora has done a good job in terms of hustling and getting partnerships. She's very good at that, networking with people and stuff like that. Honestly, to my surprise, it is still going. I didn't think it was going to go this far and I don't know what it's going to be, I don't know how it's going to exit.

It seems regardless of how well the product works, people want the concept of this project as part of your workflow. The way that we are practicing as a healthcare delivery system is going to this way. It's basically having automated algorithmic approaches to certain tasks within the healthcare delivery system. We're merely supplying the technology for that to happen. I think what it means is that we are part of a greater trend. Every day is still hard, but that means that, at least, the company is positioned in a way that it's, at least, more likely to succeed than not. We're not going against the flow of where things are going.

Interviewer: Do you anticipate remaining involved in this company or something like it later in your career?

Dr. Sun: Yes. My career goal other than surgery -- I don't want to be a surgeon forever or solely be a surgeon forever. In fact, I think people out of Duke are so smart that if you just be a clinician, it's a waste of your talent. If you look around, every single resident has some outside interest, for example, you (Justin Barr) world-renowned historian, just published in the New England Journal of Medicine. Nobody else in the United States, as a resident, has done that. They're published in New England Journal of Medicine, but they're not historians publishing.

Like Marcelo [Cerullo], talking about healthcare economics and healthcare markets in such a sophisticated manner that people in legitimate places making policy listen to him. Like Joe Nellis, looking at congenital heart surgery training or entrepreneurship and stuff in such a sophisticated manner that it's crazy. Or Morgan [Cox] making some hat that makes you smarter. By the way, I saw a product that does the exact same thing on my Instagram feed.

Interviewer: Really?

Dr. Sun: Yes.

Interviewer: I told her all the interns are going to be wearing that in 10 years.

Dr. Sun: I don't know if it really works, but it must have enough commercial purpose, enough of a market for people to sell it. I'm sure people are buying it, especially the new-age Californian people. They're definitely buying something that zaps in two seconds, that you can't feel and somehow makes you smarter. Seriously, I saw this on Instagram. I was like, "That's exactly the same thing." There's countless examples.

I don't want to just be a surgeon. I think part of my advantage is that I have a fairly diverse background in terms of tech stuff. Obviously, I didn't run a business until now, but I have a little bit of experience in what it means to start a business, what it means to pitch. I'm not completely green to it. I feel like my advantage is, I sit at the crossroads for a lot of those things, and I can communicate with a lot of different types of people. I like connecting those types of people, and being the person that creates an idea and brings very different groups of people together to move forward this idea.

I'm very much into making ideas happen. I don't like sitting around and just saying, "Whatever, everything sucks." A lot of my ideas are stupid, I have a lot of stupid ideas. Maybe one of them will work. In the future, I think one of my goals is to be someone who creates an accelerator or curates that kind of stuff and then helps these ideas flourish and succeed. I learned one of the most important things from those experiences: it doesn't matter what your idea is, it matters who you do things with.

One of the things I want to do now is actually build a network. Every time I talk about ideas, 80% of time people think I'm stupid. People think, "This is really stupid." Whatever. I want to build a network of like-minded people that want to build stuff. Companies, etc. We're all going to be affluent as surgeons and create, essentially, an angel network for that. The difference between this angel network and other angel networks is we're not just about money, we're about executors and building teammates. One of the biggest challenges I realized in building a company was finding the right teammates. Teammates who can do what they say. Who can execute and can brute-force certain things, and then just bootstrap certain things and brute force it and not worry about having to work hard.

Which I realize that 99% of people out there cannot do. They don't get it, they can't work past eight o'clock, whatever, all these things. I think people here at Duke are so unique that I don't want to lose touch with them. I think it's beyond any normal alumni network. I think it's having an active group where one person has some good ideas. It doesn't have to be commercial, it can be a research enterprise or something like that, but it has to be not just a small vision. I think it has to be somewhat of a big vision. Then have this group of people to sign on and all participate and help. I think you're not going to find a better group of people, people who don't bullshit.

One of the things I learned from meeting all these business people is, the fucking business talk is so fucking retarded. Everybody has their jargon, but let me tell you, business jargon is the worst. The way they talk about things is so fucking stupid. I

hate actually working with business people. I want to work with people I like, like-minded people, and I want to work with people who are visionaries, but who can also do things. Thought leaders that can't accomplish anything are not helpful. I want people who are just like, "Hey, that's a great idea, man. By the way, I did it overnight, I'm in the middle of a prototype."

There's going to be a thousand stupid ideas, but I like hanging out with people who are creative and can make things happen. We're going to get bored of clinical surgery one day. For some people, it's going to be sooner than others, but clinical surgery is not that hard.

Interviewer: You can only take out so many colons.

Dr. Sun: You can only take out so many colons. Yes, there's some crazy cases. But the vast majority of cases, right colon, left colon, rectum, you got cancer, you got diverticulitis, you got IBD, you're kind of done. Then if you're out there and practicing, 80, 90% of your-- Even now as a chief resident, it's actual relaxing for me to come to work and round, because I feel very comfortable doing it. I'm also not the kind of person to micromanage.

In terms of a larger picture, there's only so many things that can happen. There are things you don't know. That's why, as a profession, doctors are so worthwhile the older you get, because you're getting so much experience. But honestly, the vast majority of things are fairly easy. If you don't know, it's because you didn't study. You didn't study hard enough. You can just go to UpToDate and study. It's not that hard. You're not inventing things.

Interviewer: No. Executing.

Dr. Sun: You're just executing, sometimes mindlessly. Maybe that's cheapening surgery, but it's not as hard as being a creative.

Interviewer: Well, speaking of surgery, you come out of the lab, you're a SAR one. Are you guys going to Raleigh yet?

Dr. Sun: Yes. I went to Raleigh as my first rotation.

Interviewer: How was your SAR one year and how was Raleigh as an experience?

Dr. Sun: It was really good, but people were really encouraging to me. This is how I felt later on, when female residents came up to me and tell me that their operating experience wasn't good at here and there, that really resonated with me, because people were telling me, "You have really good hands." I was like, "That's a lie. I'm four days out from research, where I've been typing away on a computer. I have mushy hands, okay. If you tell me I have good hands, you're lying."

They didn't need to say that. Clearly the female residents were saying, "This person didn't let me do anything." That same attending was telling me like, "You have good hands. Why don't you do this and do this and do this." I felt very encouraged. My experience with the same attendings was very different. I knew I was not good, because I was day one from lab.

But regardless, there was good encouragement. I built up good relationships with attendings. I think coming out of lab, I had built a reputation for someone who's going to be responsible. Then I had talked to all the attendings enough where I feel very comfortable calling them for X, Y, and Z. I developed a rapport such that I felt confident talking to them. I had a good time, I think, SAR one.

Then also, this goes back to having no expectations. If people didn't give me the opportunity to operate, I'm just like, "Okay, whatever. It's fine." I never really butted heads with any of the attendings. I try to see the good side of things. People didn't like the Asheville rotation, but I was like, this is the only place where you get to run your own clinic. Like when a person comes in with a port. They want to take it out, and you're just like, "Okay. We'll just numb it up and figure out what to do." You watch a YouTube video, no one's ever-- Back in Duke, you got book a case and give them general anesthesia. In Ashville, the nurse gives you some Lidocaine and you just do it. It's a very unique experience. There's a lot of autonomy there.

Interviewer: I had a great time at Asheville.

Dr. Sun: Yes. As long as you look away from the weird personalities of the attendings, it's not that bad. People are weird everywhere. I don't think attendings were mean about it. They had a point. They were trying to teach you something. Even though they were very unpalatable, but--

Interviewer: I didn't even find them that unpalatable.

Dr. Sun: [Mark] Kadowaki was a little unpalatable sometimes.

Interviewer: He was just strange.

Dr. Sun: He was very strange.

Interviewer: He was dedicated to teaching.

Dr. Sun: Exactly, that's what I thought. At least they're teaching me. Then, he was the one that showed me how to laparoscopically mobilize things. To use my hands to show myself planes. Very few other attendings-- Even now. Now I know planes, people are just like, "You know where the planes are." No one systematically told me how to show yourself planes. A lot of the surgeons are good surgeons, but not good teachers.

Interviewer: Agreed. He was exceptionally patient, Kadowaki.

Dr. Sun: Yes, he was pretty patient. I did an LAR with him.

Interviewer: Yes. So SAR-1, generally good. SAR-2 year?

Dr. Sun: SAR-2 year was tiring, but pretty good too. I think I built a good reputation in SAR one year. In SAR two year, I think, because I was going to do some sort of abdominal surgery, I tried to take opportunities where I could be more autonomous and assume more of an attending role. Also, I feel like my personality in terms of like, I don't really sweat the small stuff, but I try to make the right decisions on the patient's going to the OR, not going to OR. Because I'm making those decisions fairly reasonably, I get a lot of trust from attendings. I built a reasonably good reputation, I think, because of that.

Again, this comes back to -- whether it's gender or whatever -- there are times when I get complimented on things that are not necessarily because I worked really hard for it. It was because somebody just wanted to give me a boost. That's how I felt. I was like, "I didn't think I did anything." There were a few times when, for example, I took some patient back in the OR without imaging them, because I thought they had a leak. I told Migaly that. Migaly, at M&M, said that Jeff Sun said this person needed to go, so I just went, and sure enough there was a leak. They had peritonitis.

Then I got asked a question, "What was different about the patient that made you think the patient had peritonitis?" I was just like, "I don't know. I've examined a lot of post-op day 1 patients, and this was not the right exam." I was like, "I don't know, I made the right call." There's 1,000 instances where I make the wrong call, but no one ever talks about that. But they publicize these moments where I did well. It's not like I was the first one to detect peritonitis. It was Dan Firl who came up to me and said, "Hey, I think that's peritonitis. I think there's a leak, I think you need to go back." I examined them. I agreed. I made the call. I was night chief, I took the glory, but I mentioned Dan Firl. I give Dan Firl credit, but still, if you accumulate a few situations like that, you build a reputation for someone who seemed to know what they're doing. Even though you may not know what you're doing. I was given the benefit of the doubt, I felt like, unfairly. That's why I think it's important to highlight people's credit, because those are important moments where they build that reputation.

Interviewer: I don't know if you want to talk about it or not, but at some point during SAR two year, you and Jina got in trouble for this computer programming thing. I was actually out in the lab, I don't really know exactly what happened --

Dr. Sun: Yes.

Interviewer: Do you want to talk about what happened with that?

Dr. Sun: Yes. One of the chief resident's duties was to generate daily postings. People were doing this manually at first. First of all, this came up as an idea because some of the previous chief residents wanted to suck up to Kirk. A completely unnecessary thing to do.

Interviewer: The case postings in general?

Dr. Sun: The morning report or something. I think previously there were no postings at all. We just did it. In the morning, this is what morning report was supposed to be. The in-person morning report, assign cases. Now you have those stupid emails to do. Then somebody at some point, wrote R code to facilitate that. You generate a CSV report from Epic, you feed into R code. It creates some sort of Excel file we copy into an email, and stuff like that. The problem with that was number one, you need know how to use R, and people didn't know how to use R. It was not portable, you have to keep transferring files over and over. It was not accurate. I went in, there were half the attendings. Because you need to keep updating it, and new attendings show up, old attendings leave. Formats for the raw file changed. Then you need to change how the formatting was. It was a very rigid, brute force type of way to do this. In fact, it was taking so much time, especially with people who are not that great with computers, and Jina wasn't that great with computers -- it was taking her two or three hours every day to do it. She'll like-- 4:00 PM to 6:00 PM, 7:00 PM, she'll be doing this. In the morning, she'll wake up an hour early to make sure it's right to send out the emails. That was three hours of work.

I was like, "I can make this better." Over several weekends I wrote, based in R, an app. It's based in AR, but it's a standalone app that does not require R to essentially ingest the same raw file, and then create really nice tables for every single email you need to generate. It had a default list of residents, which you can edit through the app. If, say, I'm on colorectal. I got slotted into all of Migaly's cases for the next day. You can just go in and just edit a little bit.

There's also a feature for calculating what the OR utilization every day was by every single service, because that was part of the morning report. There was a feature for analyzing what the add-on cases were. Also, all the OR postings come out with computer speak, like CPT code. It didn't make sense. It is not what the actual case is. I had a logic where I turned every one of those things into normal English. Big proctectomy blah blah into just APR. Essentially, how you worked the app was you input the file and you click a download button, and then that was it. You can copy and paste this Excel file onto an email, and you're ready to send.

Interviewer: Sounds remarkably useful.

Dr. Sun: Five minutes. I measured the time, five minutes. If you didn't have that many changes, about five minutes from the moment you download this to the moment you send. Cut down from three hours. I was testing it with Jina, and it seemed like it was already working, it seems like it was okay. I was testing a localized version. It means you just have the app run R, and just run it. You did not need to know R to do it. I was like, "Well, I got to put this online, so that people can use it from any computer without any knowledge."

I spun up a server in my house, where people can connect to my IP address, and then go to this website. I was testing it. I'm not into security. It was not protected by

SSL or HTTPS or something like that. I don't know all those fancy terms. Essentially, Jina tested it from work. What Duke detected was that the moment you downloaded the CSV file with patient OR information, it had MRN and stuff like that, you upload it across the internet, the electrons traveling through the internet got caught by the firewall of Duke.

Red flags popped up, "Somebody from Duke was sending significant amount of patient data across the internet, unsecured, to a server five miles from Duke." I got a page from the CMIO, the Chief Medical Informatics Officer, Eric Poon, to take down the server. I wasn't trying to hide it. I said it was made by me, it was for Duke.

Interviewer: It wasn't surreptitious.

Dr. Sun: **I**t wasn't surreptitious. They accused me of stealing PHI. I shut it down. Over a six-month process-- This was July -- over six months, I had three or four computers confiscated to be forensic imaged, where they try to detect more things. I had to meet with a Duke compliance lawyer, who was an idiot. She did not understand how the app worked. She tried to understand, but she was not smart enough to understand. It was extremely frustrating for me for a long time. I very quickly understood this lawyer is not for me, this lawyer is for Duke, and they're trying to catch me in something.

They took my computers. I didn't have a computer, I didn't have a laptop, I didn't have a desktop. Then I had some personal files on my computer I deleted after they told me I had to send them my computer. They detected that I deleted those files and then they said I violated some rules, because I've deleted personal files. I knew from the grapevine that they were seriously thinking about, from a health system perspective, firing me and Jina. Straight up, just firing.

Interviewer: Did surgery department go to bat for you?

Dr. Sun: Probably Kirk and Migaly did to some point, but Migaly told me they did not even quite understand what was the problem. Because once I explained things, a reasonable surgeon would be like, "That sounds pretty reasonable." Jina was the chief resident at the time. Apparently, Kirk had told her that this is like the Hillary Clinton emails, a bunch of nothing. Maybe it wasn't the greatest idea, but you didn't really harm anybody.

But a bunch of people, security people who have no experience, who don't really understand the larger idea of what's going on, essentially, were trying to fire me. It wasn't a joke. I'm sure documents were written up about what the protocol is for firing me. At some point, the department must have stepped in a little bit. I have to thank them for-- I'm sure they stepped in. If they didn't step in, I would have been fired. If they just let the health system do its thing, the University would've fired me.

They stepped in and gave me this corrective action plan. They gave me back my computer, and my computer didn't turn on. I knew why it didn't turn on, but I wanted

to be a dick. I almost threw a fit at the IT people. Before all this, before I talked to the forensic people, I had to talk to IT people demonstrating how the app worked. I sat in the room with three middle-aged IT people who don't understand anything about web development, didn't understand anything. Who couldn't comprehend the fact that I don't keep patient data. Everything this app ran was in memory, and once the memory was gone, it was gone. It disappeared. I showed them the source code of what I was doing, and nowhere does the source code say--

Interviewer: Did they even understand source code?

Dr. Sun: They should. I showed it to them. I even emailed this to them. I showed them everything.

They showed me the correction action plan. They said all the things I did wrong. It's one of those things like, if they don't care about you, if you do stuff like, you'll get away with lots of things. But once they catch you for one thing, you get caught for everything. One of the things I was violating was, "You have pictures of patients on your computer and your phone. Specifically this Dropbox folder." I was like, "That Dropbox folder was owned by Lisa Tracy, shared with Jina Kim, who shared it with me." Instances like this, where half the things we violated are not even our things, but they've bundled with our problem. They crammed down this thing I had to sign. I had no choice. I thought about getting a lawyer and said, "Fighting is probably not a good idea." Just like, "You want to lawyer up, everyone's going to lawyer up, and it's just going to escalate."

Part of it was Jina didn't have administrative privileges for a long time. She got taken off of admin chief. We were on probation for whatever. I had to make a public M and M for that, which everyone saw, where I had to explain myself. Funnily, this is Jina's idea. This will come out years later. Jina's idea, Jina's like, "First two slides you need to show people how the app work and pretend like you're selling the app." That's what I did. At the end, Blazer was like, "Can we still use this app?" This M&M was attended by Jeff Ferrante, the CIO, there's three lawyers there, Cathy Kuhn was there, Eric Poon, the CMIO was there. There were six high up C-level people. They were talking about how if this got out, it would've been millions of losses, millions of dollars of penalty. I was like, "Fuck all of you." You guys don't get it. This is what's wrong with healthcare. But I joked to Jina, I was like, "When we make a mistake, we make a several hundred million dollar mistake."

Interviewer: [laughs] Well, fortunately you guys get to stay in the program.

Dr. Sun: Yes.

Interviewer: Did it affect your reputation within Duke surgery at all?

Dr. Sun: Funnily, I think I gained notoriety. People were like, “nice app. make sure you build an app for this.”

It's funny, sometimes I try to improve things around my life. At the Asheville VA, there's no wifi. Sad story. There must be a statute of limitation for this. I bought a router to try to connect them to the VA system at Asheville. I didn't know that VA security is quite good. The moment you unplug a network cable, the entire jack shuts off, because it detects you're trying to tamper with it.

I did this when Jina was working there. I screwed up the entire network within the bunker area for a weekend. I told Jina, I was like, "Pretend like you don't know what's going on. Monday they'll fix it." They're like, "How did this happen?" I don't know. Later on, years later, I tried to tell Migaly. Migaly was like “la la la. Do not tell me anything; you're trying to get yourself fired. I don't want to know."

Interviewer: Did you at this point already know you want to do colorectal?

Dr. Sun: Yes.

Interviewer: When did you decide you wanted to do colorectal?

Dr. Sun: I think research year.

Interviewer: What about that specialty appealed to you?

Dr. Sun: I think I like that patients do quite well. It was gamut of technical challenges from really easy anorectal cases to big rectal cases. There wasn’t a crazy amount of thinking. There was reasonable decision making, like the cancer stuff. But it wasn't crazy in terms of remembering stuff and thinking like breast cancer is. Breast cancer is too hard to remember. Also, you get paid pretty well. You're in reasonably high demand, and all your procedures pay pretty well. Yes. I think it's just a good overall specialty. You're a respected member of the community.

You're helping people, patients do well. You're not doing a case and then six months later, finding out the patient died. You're not dealing with end of life care, you're dealing with-- Even with stage four disease now. you can tell patients you're operating with curative intent, which is good for patient relationships. Everywhere you look, it's good advantages. The vast majority colorectal surgeons are very reasonable, very chill. They get it. They're not micromanagers. I think everything about specialty fits.

Interviewer: What's chief year been like for you?

Dr. Sun: Pretty good. I think it's important. Everything builds up to this year in terms of reputations and everything. People let me have a lot more autonomy. Especially since I'm declaring for colorectal surgery, and I was on multiple colorectal rotations. Migaly being a program director, he has taken a very hands-on approach in terms of trying to train me. He forces me to do stuff, and I think more than other residents who maybe going to other specialties. He tells me extra things. Even Mantyh, who is not very talkative, would tell me things like, "This is the thing that I do to get things

better." These are chief level teaching points that they're trying to give me. Which none of the other services-- On vascular, they don't give a shit about me. You notice a huge difference when it's your own people. I'm very appreciative of that.

Then I chose to do a month of ACS, because I knew I was going to be taking call. Even colorectal, half of it is general surgery. You have to be comfortable dealing with disasters, and I'm the only chief this year to do that. I think it's really important. I think every chief should be doing it, but for whatever reason, people really hate ACS.

Interviewer: There are several compelling reasons.

Dr. Sun: Yes, but you can hate individual attendings, but I think as a service, ACS provides a huge service. it's an important component of surgical practice a Duke and provides a huge component of our education. To not have the chiefs have any opportunity to do that is wasted opportunity.

Interviewer: Your chief year has been interrupted by COVID-19. How do you think that's affected your experience?

Dr. Sun: COVID-19, frankly as a surgery resident in North Carolina, it has not been interrupted that much. I was at the VA. It turned from doing a bunch of hernias to doing every single difficult case for the next two months, all crammed into one month. I think I had a reasonable operative opportunity. To be honest, yes, it was a big thing for lots of States and lots of other residencies, but here, it didn't affect my life that much. It just gave me a lot of time off.

Interviewer: Your class has developed a reputation, at least among us junior residents, as a class that has been very proactive about trying to improve the experience. Can you describe some of the initiatives that your class started and some of the challenges you all tackled, what the process was like, the response that you all got and the results that you've seen?

Dr. Sun: I think one of the biggest things is trying to improve the ACS service. Well, actually starting at the beginning, we tried to do small quality of life improvements. For example, the bunker. We got a new sofa after 20 years, got a bunch of phone chargers, a lot of small quality of life stuff. Then in terms of bigger education stuff, I think we were interested in improving ACS education. I think that still a work in progress. We got ACS to have education sessions about trauma and general surgery topics.

Whereas, previously it was just basically a score conference. This was one of Jina's ideas, to have senior conference, SAR conference, as a board review. It was not credited to her, but I know she brought it up to Migaly. It was blown off, honestly, but I know that she was the one who pushed for that. I think changing the conferences, change in some of the education stuff, it was good.

Interviewer: Now you've been here eight years. What are some of the major changes you've seen in the program over the last eight years?

Dr. Sun: I think it just goes back to culture. Culture is the biggest change. I'm much happier with this group of people, you might call my friends, now, compared to eight years ago. Like I said, eight years ago, I had zero social contact beyond the interns. We were not encouraged to do anything.

Interviewer: Where are you going next?

Dr. Sun: Washington University in St. Louis for colorectal fellowship.

Interviewer: How do you see your career unfolding, as best as you can tell? We touched on this a little bit earlier.

Dr. Sun: Yes. Probably want to do clinical surgery 60% of the time; 40% of the time, innovation, entrepreneurship, that type of stuff. Whether as an operator or as a fund type of person. Wherever I go, I want to be part of their venture arm, build up a reputation for evaluating deals and stuff like that.

Interviewer: Is there anything I didn't ask you about your experience at Duke surgery that you want to make sure you get on the record?

Dr. Sun: I think it's a shame that a place like Duke -- Maybe it's not just at Duke. It's a shame we can't filter for personality more in this field. This year when I interviewed all the medical students, everybody has the substrate to succeed. Most of them are already successful. They don't need surgery, obviously. But I think it's really toxic to allow someone who is at baseline sociopathic to have the opportunity to succeed, career-wise. Because it merely builds upon- it feeds into their narcissism and sociopathy and creates a bad environment for everybody, creates a bad future for everybody. It also means that they become, they enter a pool of people, affluent, more powerful people that have the opportunity to change and shape the way society runs in the future.

Interviewer: How would you set about screening personality?

Dr. Sun: I don't know. It's impossible to do that in an interview, everyone puts on their best face. You can't get personality vouches or-- I forgot what it's called. But case and point, my intern class: Jina, obviously I'm married to, has made me a better person. Upchurch, very good person. Shoffner, super thoughtful. Jim wants to do the right thing, but he can be a little uptight sometimes. The other two are crazy. They may be able to hide it well during an interview, but they're extremely selfish people. Being selfish in a group environment is completely detrimental. It destroys the group.

Everybody's a little bit selfish, sure. But being so blatantly selfish, I think, is the root of 90% of badness that happens in this world. You feel like you deserve or want

something for yourself that other people cannot get or other people did not deserve. Do you think you're better than other people, for no reason? The two unmanned people from my intern class are definitely people who would think that they are better than other people for no reason.

Interviewer: Well, hopefully won't find any of those in your fellowship class.

Dr. Sun: Yes. I don't know. It's hard. You're not going to escape people like this. But I don't know how-- Right now, in 2020, as a society, we're not really in a position to foster caring people. In fact, it fosters more individualism and narcissism, if anything. But I don't think it's going to change without a world war or something like that. But yes, I don't know.

Interviewer: Well on that happy note, thank you very much for your time. I appreciate it.

Dr. Sun: Yes. Thanks very much. Thank you so much.

[02:04:02] [END OF AUDIO]