Duke Surgery Chief Resident Oral History Project

Dr. David Ranney

Interviewed by Justin Barr, 8 May 2020

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Interviewer: Good morning. This is an interview of David Ranney. It is the 8th of May 2020 at Duke Hospital. Thanks so much for joining us, I really appreciate it. Do you want to start off telling us where you came from, where you grew up, where you went to school, how you got interested in medicine?

David Ranney: I was born in Virginia. I moved to Michigan when I was four and stayed there in southeast Michigan in a city called West Bloomfield. I went through all schooling there, and then I went to the University of Michigan for undergrad. I got my degree in chemical engineering and then stayed there for medical school.

Interviewer: When did you decide you wanted to become a doctor?

David: Interestingly, I think when I was probably five, six, seven years old, my parents saw that I could count a lot better than the other kids, seeing that I was good at math and had just a natural affinity towards science. At that time, the logical thing to do was go into engineering. My sister was an engineer and actually, her husband is also an engineer. They're both PhDs in chemical engineering. For whatever reason, it's in our DNA, I guess.

I pursued that. I was interested in cars. I thought I was going to do mechanical, maybe automotive. I just kept that going for several years as a kid, just totally naive to what that field would actually entail or what it was all about. I thought it was good work and you draw cars and they make them and they go fast and you feel cool about it. I got towards the end of high school, and I thought this is probably a good time to really seriously consider a profession and not just an interest.

I looked at a lot of different things, engineering obviously being one. I also looked at architecture, and I realized that my brain works in a logical way and not in an artistic way, and I realized I was not leading the class in that endeavor. I gave up on that. I thought civil engineering, but I lost interest in that really quickly. I thought about business, but it was a little bit dry for me. I really hadn't considered doing anything in the medical field. In fact, I hated hospitals as a kid. I remember going there a couple of times here and there just for a parent having a routine appointment or something

and seeing someone with an illness walk by, and I thought, "Oh, gross." I wanted to stay away from them and not catch whatever they had, let alone see blood or anything like that.

Obviously, as time went on, I matured and grew up. I said, "What the heck, I'll shadow a couple of people here and there." I worked in an emergency room just as a volunteer for a couple of summers as a high school student. I realized it was a very unique environment. I saw people interacting in different ways. The first time I actually saw that patient-doctor relationship in action, I thought, "This is not at all what I thought it was. It's not just this scary ivory tower where patients are screaming in pain all the time." I thought, this is different. I saw people being treated.

I thought, "All right, well, this is something to look into." Then I got to Michigan as an undergrad, and I said, "Okay, well, let me shadow some surgeons." I googled surgery, and I saw a video, and I thought, "Wow, I'm pretty good with my hands." At that time, I'd been playing the violin since I was nine years old and I was like, "Okay, I have good hands. I can do this." Not knowing who any of these people were, I just called and emailed a bunch of faculty at Michigan including, like Dr. Orringer, one of the biggest names in thoracic surgery. I said, "Hi, I'm Dave. I'm 19 years old. I'm an undergrad and I would like to learn about surgery."

Surprisingly, pretty much everybody replied with, "Yes, absolutely. Come on down." I shadowed him in clinic and in his operating room, I shadowed Dr. Peter Henke, a vascular surgeon. I remember meeting him at 4:30 or 5:00 AM at the VA in Ann Arbor.

Interviewer: That's early for an undergraduate.

David: It was really early, it was dark, and it was in the winter. I remember thinking, "What am I doing?" I showed up and he took me around, saw patients, he let me shadow one of the other general surgeons and I just remember seeing it in action for the first time, I was like, "This is pretty surreal." I also noticed they were on their feet during the day, they were multitasking, it was unique. I said, it would be hard to get bored doing something like this.

Not only does it seem personally interesting, but you get to help people. I thought that was a pretty good combination of things. I kind of held on to that, and by the end of my first year of undergrad I said, "I'm definitely going to go into medicine." Surgery was the first thing that I saw, and it clearly imprinted on me, especially thoracic surgery. I continued to shadow, I continued to do a lot of other things. I then worked as an EMT for a few summers for an EMS company in Pontiac, Michigan. By then I was fully prepared to go into medicine.

It was an interesting journey getting there. It was a last-minute reevaluation of things, and here we are.

Interviewer: Did you take any time between undergraduate and medical school?

David: I did not. At the time, some people did it. Nowadays, I think it's more common than not, but at the time people would do it for various reasons. I had already started work doing some clinical research towards the end of undergrad with some of the transplant surgeons at Michigan, Dr. Englesbe in particular. I had been working in EMS, I had been doing all the things that I wanted to accomplish while I was doing my engineering to prepare me for med school.

When the time came, there wasn't anything that I thought, as far as it added value during that year that I would do, so I ended up going straight in.

Interviewer: How'd you pick Michigan for med school?

David: To be honest, I think a lot of it was just because I had already nestled in there as an undergrad. I met a lot of people, I had a lot of mentors already. I also started early in med school working in the ECMO lab there, Dr. Bartlett's lab. I had known about that lab while I was an undergrad, and at the time my interests in CT were brewing, and so it just made absolute sense for me to stay there.

Obviously the other benefit of that is my family was still in West Bloomfield, which is less than an hour away. My sister was still getting her PhD at Michigan. It was just the total package.

Interviewer: How was your surgery experience like when you were a med student in Michigan?

David: I remember it was a good experience. It was a tough experience. It was different than it is nowadays. I remember you were a functioning person on that service, you had a very clearly defined role and high expectations. The professional boundaries and your professional relationships with people on the team were very clearly defined for you. I remember going to the operating room and scrubbing cases with Dr. Mulholland, the chairman of surgery at the time, and it was great. He would ask you the standard questions, you were doing standard cases that you would have read about, you were really learning -- almost like the tail end of an era of surgery.

I remember doing gastrectomies with him for ulcer disease and things like that. It was interesting to be a part of that, you really got to see everything in action. It was a good rotation. I was very busy on it. I think it was the first time I got a real taste of what it would be like. I think that was important.

Interviewer: You alluded to the fact that it was somewhat different than the medical student experience in surgery now. Could you elucidate some of those differences between your experience and what the average student has now?

David: Sure. In general, I think the students nowadays get a good experience on their surgery rotation. I think some things are different. For one thing, is just the evaluation of students. I think we've tried a number of different ways of trying to evaluate how a student is performing on service. We've tried different modalities and

surveys and things like that. I think we're still trying to fine-tune how to figure out how to do that.

On the flip side of that, I think it's different for the students trying to get a sense of if they belong in surgery or not. Early on, they really gave you a full taste of what it was like. It's challenging because simultaneously, you're trying to not be hard on the students, but you're trying to give them an accurate representation that this is a serious field to be in, and so you have to be a little bit stern with them at times. At the same time, you're also trying to inspire them to go into that field. There's a very fine line between weeding out the ones that really won't thrive in that field, but also not scaring away smart, talented people who could thrive.

I think we've migrated more towards the softer end of that. We're much more cognizant of the emotional well being of the students and for better or for worse; I think there's pros and cons of how we've shifted, but I think overall they still get a good experience and I think that being more aware of it is important because teaching is something that will be a part of our job moving forward. It also gives us a chance to use those skills to inspire and teach at the same time and not just maintain a hierarchy.

Interviewer: Well, going back to Michigan, were you pretty convinced you're going to go into surgery following your third-year rotations?

David: Yes, I would even say as a first-year student, I knew surgery was what I wanted to do. We had a couple of rotations to start that were general concepts, but our first actual organ system rotation was cardiovascular. I saw that and I was like, "I have to do that." Then I started working in the ECMO lab where we were putting pigs on ECMO and things like that. I felt a very natural fit there. I tried to play my own devil's advocate and tried and convince myself not to do that, to see if it felt any more right to be something else. Every time I did that, I always came back to surgery, especially cardiothoracic.

I thought that was important to do. I thought I had to do my own due diligence, but by the third year I definitely knew that's what I wanted to do, especially after having done the clinical side of those rotations. Then clearly as a sub-I, I felt very comfortable. I did one in thoracic, one in cardiac, and then one at the VA, which encompassed general and vascular and very unique experiences among themselves, but I was carrying the consult pager for thoracic surgery as a sub-I and staffing directly with Dr. Orringer big cases, like perforations and strangulated paraesophageal hernias. I specifically remember those. It really got you thinking about where you're headed, and so there was no shred of doubt I'd say at that time.

Interviewer: when you applied to residency at that time, there were options of doing either an I6 program in cardiac or a standard residency. Did you think about the I6 option at all?

David: Yes, I did. At that time, I'll say that the I6 programs were relatively scarce and none of them had graduates of the program yet. The benefits and the disadvantages were not yet flushed out. At that time for one, believe it or not, my third-year grades in pretty much everything were not all honors. My fourth-year grades were all honors, but my third year, I think I kept my head down and I read a lot and I just kept to myself. I think that led to worse grades because I didn't really show up with this bright-eyed enthusiasm, and for whatever it's worth it translated differently even though I very much was working hard.

I knew that even if I wanted a spot, I thought that I probably was lacking in one aspect. That might be enough to not be that successful, because at the time the programs that offered it -- just because it's I6 doesn't mean they're all the best programs. Some of them were programs that don't even exist nowadays or struggle a lot. Knowing that there's only one, two, or three spots that really are what you want, it wouldn't have been worth doing that.

Also, at the time applying to both general and I6 programs, a lot of programs frowned upon that. They were stuck in their ways about that. You had to be careful about how you were applying. But when it came down to it, I looked at the two ways to train and again, this is based on how it was in 2012. I decided, I said, "I cannot go wrong by training the way that all my mentors have trained." They've done this for decades. This is how they've done it. I said if I want to be like a Dr. Orringer or be like any of my mentors, I'm not going to go wrong by doing it that way.

Doing an I6, even though it was novel and had clear pros to it, I thought that it was not tested and it would be a risk. Not to mention it'd be a lot of pressure to be the first or second wave of people going through those programs and not knowing if in six years you're going to come out on the other end being as proficient as you need to be. Nowadays, things are a little bit different, but we are still trying to figure that out as a field.

Back then, it was an obvious decision for me to apply to a general surgery program specifically. That said, I ranked places taking into great account whether or not they had a fast track program like Duke, because I thought being able to sit for both boards, which I interpreted as being proficient in both and I wanted that foundation, but also I knew what I wanted to do. If the option came up to accelerate a little bit through that, I was willing to take that, just not at the expense of not having a general surgery foundation.

Interviewer: Michigan has one of the most outstanding surgery programs in the country. Staying there, I'm sure, was an option for you. How'd you end up at Duke and then what was the reputation of Duke Surgery when you were applying in 2012?

David: That's a good question. I'll say for one thing, I ranked Michigan third. Even though they did not have any fast track program at the time, I recognized that they were an outstanding program, and I had family in the area. I wanted to keep it up there in my list. I think that I had grown up in Southeast Michigan. I went less than an

hour away to undergrad, stayed there for medical school, and knowing what I was going to get myself into as far as training, I knew that would add on another 7 to 10 years.

I had to make a decision: do I want to spend another decade of my life again in the same place, or do I want to go out there and enrich myself and go to another place that offers everything I need, but also has elements to it that make me a little bit more interesting of a person, give me a little bit new perspective on things? That's what I wanted to do. It was time to leave the nest. That's what I prioritized a little bit as well. Duke was outstanding. I remember meeting with Dr. Orringer and I showed him my rank list and Duke was number one.

He was obviously not shy about his opinion on each place that I listed. I remember he pointed at Duke and he circled it and he said, "Good." I knew that that was where I needed to go. That's all he had to say, and I knew that that's where I had to go. I ranked that first and Brigham was a close second. I also had a good experience on my interview day, and they had a 4/3 program there too. Having come down to Durham -- I actually got in here for med school and went on a second look here. I almost came here from med school -- I really liked the area. I really liked the people and the culture, and I thought it'd be a good place to be. I'm not so much a city slicker, and even much less nowadays, seven years into training. I think it turned out to be a good decision.

Interviewer: What year did you start and who was in your intern class?

David: I started in 2013. At that point in time, my intern class, it was me, it was Tunde Yerokun**,** Pat Davis was also in my class, Mike Mulvihill, Alice Wang, Shannon Sprinkle and Mithun Shenoi. It was the seven of us. Right now I think the only remaining people are me, Alice and Tunde, for various reasons, mainly due to research and things like that, but that was us. We were the seven.

Interviewer: What was intern year like at Duke in 2013?

David: Intern year was very challenging. It's funny to look back in medical school realizing how much we stress about knowing what anatomy is connected to what anatomy and just those kinds of elements and, "Oh, how do I treat AFib? how do I treat low urine output?" and all these things we stressed about, that we tried to memorize. We thought that if we could master that, we would show up to intern year and just hit the ground running, and that couldn't be further from the truth. I remember my first rotation was cardiothoracic nights, and that was before we had APPs at night, and it was before someone else covered cardiac.

I had shown up, and I was in charge of five different services in CT. I think there were like 80 or 90 patients, and it was at night. No one's around except the ICU, which I became good friends with pretty quickly. I remember I showed up in a shirt and tie, because I didn't know where the scrub machine was. I didn't know where the

operating room was. I didn't know anything. There was a patient emergency that night, and I had to find the fellow who was still in the OR.

I went to try on a bunny suit, and all they had were smalls. I kept breaking through them, and I was freaking out because I had like 10 pages in that amount of time it took me to just find the bunny suits, and everyone was in AFib, and it turns out no one uses metoprolol for AFib initially here. Everything I thought I knew was just completely out the window. I thought, what I need to survive right now is I need to know where's the food, where's water, where's shelter, where's the OR, the scrub machine and a stick of phenylephrine. It completely changed my perspective of what it means to really be a resident. That first night was long. It was a long night, and it was a long week, because that was what I was on that week.

I remember thinking, “what did I get myself into?” It just took time. It was very humbling. You just have to step back and realize, I'm a novice, I'm a true novice. You just realize I'm going to learn more from the fellows, the nurses, the APPs in the unit. They're the ones that are going to give me that early start. I accepted that early, and it made the year better. I also was a reading addict that year, because I just wanted to get up to speed as quickly as possible to minimize the amount of time I felt the way that first night felt. I read a lot, a few textbooks that year. I just pounded through it. I did well on the ABSITE that year because of that. I realized, okay, I'm doing okay now.

Towards the end of that year, I was ready to keep moving, and it got better from there, but it was a tough year. The expectations were really high. The chief class that year was tough on us.

Interviewer: Who was the chief class?

David: The ones that I remember, Dave Bhattacharya, Drew Barbas, and Georgio Zanotti. Georgia Beasley was also one of the chiefs. I'm blanking on the rest, but it was a good mix of chiefs. They were very old school chief residents, and they were held to high esteem. We perceived that, and we treated them with that, and we knew our place. We worked hard. We wanted to keep the chiefs happy and, in effect, keep the attendings happy.

Interviewer: Any good stories from intern year?

David: I guess for one thing I remember, the ICU, the CT ICU was short-staffed in January, and so they needed a resident, and they didn't have enough second years. I got field promoted as an intern to be in the CT ICU. I remember showing up, walking past a patient's room who was on a ventilator, dialysis, ECMO, and three other machines I hadn't even seen before in my life. I remember showing up and the nurses are asking me something about heparin and the CVVHD and that it's paused or something, or clotted or….I remember just thinking, how do I maintain my own dignity and at the same time, provide the correct answer?

I learned quick how to say, "Oh, that's a really good question. I could see this going a couple of different ways. Let me look at a couple of things, and I'll get back to you," and then I would immediately turn to the APP next to me and say, "What the hell is CVVHD? What do you mean there's different kinds of dialysis?" But by the end of that month, I was ready for anything. Just every time I was thrown in the water and swam back to the shoreline, it was interesting. Clearly, my memory is blanked out a lot of those experiences for my own longevity..

Interviewer: So now you're a chief supervising interns, how do you see the intern experience having changed in the seven years you've been in the program?

David: I think it's hard as the perspective has shifted. I'd say overall, the message is about the same. A lot of it has changed, too, because when I started, Dr. Kirk hadn't arrived yet, but since he arrived, there's a clear message from him on how you should be as a resident. I think the interns, they see that when they interview here, and then they come down and they start here and they try and maintain that. I think there's much more of an emphasis nowadays on work-life balance. I think people interpret that in different ways. In general, that category, I think people are emphasizing, trying to treat the interns with respect, but we're also trying to maintain a toughness on them for their own good.

I don't know. I think overall, the interactions are about the same. I think we're slightly less aggressive than some of the older classes. At the same time, there's a job to do, and patient disease doesn't care if you're happy or not. It's going to persist. Being able to teach them how to learn about themselves, learn their limitations, and grow from there. I think its something we're all trying to figure out the best way to do.

Interviewer: You're promoted to JAR year. Some people think JAR year is the hardest year of residency. Other people look back on intern year with much with much worse memories. Do you have a strong feeling of which year was more challenging?

David: To be honest, I think they were equally challenging but in completely different ways. I think that intern year was like the emotional, mental challenge of how to just swallow your pride completely and just start from scratch. That's hard to come in that way, because people are like, "Oh my gosh, you've gotten into Duke surgery. You should have a crown on. [laughs] That's how people back home make you feel. Then you show up, and you're the chimney sweep in some ways, and that's okay. I think that's the way it should be. You start from scratch, and that's hard to do your first year. You are de-identified and you have to rebuild your identity again. You did it in undergrad, you had to redo it in medical school, here you are redoing it again.

Everybody's smart, everybody did well on their boards, no one knows you yet. Knowing you have to prove yourself again, that's challenging. The second year, JAR year, that was physically exhausting for a number of reasons. I remember I enjoyed that year, I think, overall. I hated intern year more than JAR year, if I were to say it that way. JAR year, I remember my first rotation was trauma. I remember showing

up to my first trauma that I ran the first day. It was a rush. I was doing my thing, we were putting in lines and the trauma surgeon was barking from the foot of the bed, but we're getting it done. I felt like I was getting my hands dirty, like physically doing patient care. That felt good. Then I went on a month of vacation, which was much needed.

I came back and then the rest of the year was a lot of ICU and consults, but you're running around the hospital, just the stamina of patient care that year is tough. You really learn to love those six days in a row and then you get a day off. It's really not enough, but you learn how to make it enough. You learn how to organize yourself during the week so that it's less stress on you physically and mentally. I'd say that was probably the challenging part. Then over at the VA, we didn't have any APPs yet when I was over there, so I was doing all the tasks.

That was exhausting because you also felt the responsibility to the patients where if you miss something small, it could end up someone not getting chemotherapy, and that's a big deal. The added pressure of the responsibility, I think, just made it an exhausting year.

When that year was done though, everything is pretty front-loaded here at Duke. I think after your first and your second year, you really have a foundation to take care of anything outside of the operating room and then really focus on your operative skills the rest of the time.

Interviewer: You went to the lab after your second year?

David: Right.

Interviewer: What research did you end up doing?

David: I did a few things during that time. As far as research, I did mainly clinical outcomes research with Mani Daneshmand. We had an ECMO database that we were growing at the time, and we were publishing on our own data at a high volume center. We had some good papers and presentations. The other half of that effort was in aortic surgery with Dr. [Chad] Hughes. Again, we had a big database that had been growing over more than 10 years, and we were doing pretty high caliber outcomes research, talking about our own experience. We had some really thoughtful projects. Not just general broad strokes, but very specific but in-need research that was well-received by audiences when we were presenting.

Interviewer: Any particular papers from either of those efforts that you were especially proud of or that really moved the needle on aortic surgery or ECMO?

David: I would say the projects I'm most proud of are the ones that were really the first to come out of Duke. For example, we talked about outside hospital transport and transfer for patients on ECMO. I remember, that was an area of the ECMO that was only defined by high volume centers and big referral centers. It was a hot topic,

people trying to figure out, "Do we accept that patient or do we not? What do we do with them when they get here? Do they do worse? Do they do better?" Hammering out those details and actually seeing our results -- I was pretty proud of being able to capture that and report on that.

In aortic surgery, there's a couple of projects, one in particular when we looked at our entire TEVAR experience, the long term outcomes, and demonstrated how good the outcomes can be. I think that was important, because I see that it gets cited quite a bit. Like I said, the hypothesis was already in place before we did the research, as it should be. It's not just, "Let's crunch a bunch of numbers, see what P-values tell us what's important." No. There's clearly contradictory info and literature and no better place than Duke to try and help sort that out. I'm proud of those that created really good discussion at the meetings, and I learned a lot doing them. The mentorship was good, especially Dr. Hughes. He combs through every detail of everything. I've never learned how to write a better paper than by working with Dr. Hughes. That was the end result of that.

Other things I did during that time: I was interested in other applications of being a surgeon to the outside world. For one, I worked with the Duke Angel Network. That's an investment network here at Duke where there's different parties involved. One is the alumni or Duke affiliates, could be faculty, anybody with a Duke track record, who is an entrepreneur, who's either a founder or board member of a company. Another party is the investors who are Duke affiliated in similar ways. They're the ones who hold the money and are Angel Investors. Then in the middle is the associate team comprised of, at the time, it was just business and law students at Duke, and the managing director John Glushik

I remember there were a lot of companies that were medical-related coming through, and they really didn't know how to evaluate these companies. Just incidentally, through a connection I had in the engineering school, they put me in touch with John Glushik, then I was the first MD to be on that associate team. First of all, I was super impressed with the law students and the business students. The degree of knowledge they knew as a student and being able to apply that already -- I was super impressed. I thought, "This is a great group of people." They didn't know the slightest thing about medicine, as it should be, right?

These companies would come through, and I would evaluate them, and I could tell pretty quickly what was a viable company to start and what wasn't and what things were important to us and what weren't. People trying to invent super expensive NG tubes that could detect when to feed or not. I said, "I can put my hands on a patient to figure that out. We don't need a million dollars to do that." I would accept the million dollars to be able to do that. That's not how the world works. I felt like, "Wow, I can really offer something here." I had a really great experience in those two years.

We were screening companies, working on diligence for them, helping investors decide if they wanted to invest in some of these companies. I learned a lot about how companies form. What it means to be a founder or a board member or learn

about stock and shares and how those evolved throughout investment rounds. It was very interesting to be a part of that and see another dimension of what we do here. It's relevant because we take for granted these devices that show up and we use them, and we don't think twice about where they came from or how they started. You realize that it really just could be just an engineer somewhere sewing some fabric onto some wires and a business person who says, "That could be big someday. Here's the money." You don't realize that there's such a process, all the regulatory aspects, everything. I think it's very eye-opening. It has helped shape a little bit of how I see things.

Another thing I did during that time was, I was interested in getting residents and fellows involved in medical device development, even though I didn't have any personal experience with creating a device. I was interested in it being an engineer, and just having an affinity for that clinically. I started a group called Innovate MD, which basically brought together trainees, even faculty, and the engineers and I'd say more like an interest group on steroids, in a way, and we had speakers come, we met every so often and provided a lot of resources for them, created contacts. Basically, built the network between the two, because there was a lot of innovation going on, on either side, and they didn't know about each other, so I wanted to bring those groups together.

I wanted to start a bio-design type fellowship. That was a big bite to take. We worked on that. Things inched a little bit toward that, and then I went out of the lab and other folks came in and created basically that through the Duke INE**,** Innovation and Entrepreneurship Group.

Interviewer: There is a fellowship basically in bio-design?

David: Yes, exactly. It evolved out of it INE. I worked with those people early on and helped them identify a need, I even provided them some fellows for the program early on. It was a good way to be at the beginning-

Interviewer: It's pretty exciting.

David: -stages. I just wanted to see that interest and help catalyze that a little bit amongst the trainees, because I think it's important to have an outlet from clinical duty that applies to what you're doing, but could also be an interesting way to keep things fresh.

Interviewer: You came out of the lab after two years?

David: Right.

Interviewer: You ever think about doing a third-year, or two was plenty?

David: I think two was plenty. I didn't get any grant money from the early applications, so I wasn't committed to any time course. The clinical outcomes

research I did, you can do that forever. I didn't think that adding another year specifically was going to exponentially increase my productivity. I thought things will probably continue as they were. All the other things I was working on, again, you can work on forever. I thought it'd be more important to re-shape those endeavors into something that I can continue, lower the burn rate a little bit so I can be a surgeon and still maintain those things. I came out of the lab and was ready to go. I was interested in getting back and keeping up with training.

Interviewer: In your third year, you applied to this joint training program. Is it that something you had planned to do it from the beginning, or a decision you made over the course of the first three years?

David: Yes. I'd say as soon as I got to Duke as an intern, I was pretty much committed to CT and I definitely had my eye on that program. I think I met with Dr. [Thomas] D'Amico as soon as possible to let him know that and then from then on, it's really like a four or five-year interview where you just have to work hard and do well and show that you have potential to lead and be productive and maintain every aspect of a surgeon that you should have. Hopefully, I've done that.

Interviewer: How did being in the joint training program change your experience from, say, someone who went seven and two or seven and three?

David: I think as a fourth-year clinical resident, as a SAR 2, we do a couple of months on cardiac. We do a couple of months at the VA in thoracic, and that's the extent of our CT experience that year. We do some vascular, which counts towards that, but the true CT rotations are just about four months. It's good to get a good taste of it and realize like, "Wow, I know nothing about cardiac." Great. [laughs]

Interviewer: Back at the bottom.

David: Back at the bottom. You're taking the consult pager, you're washing out a lot of chests, you're doing a lot of things that you should be doing as a first-year. Again, it's a good taste of where you're at. Then you go back to general surgery, and you spend some time there, and it gives you a good chance to reflect on things. Then your chief year, it's a bit of a bipolar year, because you're two months in CT, and then you're two months on general surgery. Embedded in that, in CT you're doing two months of thoracic, two months of adult cardiac, and two months of congenital. Even among those three things, they're very different.

Then general surgery, you're doing surgical oncology, then you're doing colorectal, and then you're at the VA, and I have to be at VA during a pandemic. Every two months has been a very different experience throughout the year. You're flipping back and forth. It takes some effort to figure out how to study, what to study and when so that you're performing at your highest on any rotation, general surgery, or CT. I think it gives you an interesting perspective on both. I'm glad that after this year I'll be starting as a second-year, having had that under my belt. Right now I'm

reading and recapping and reviewing some things to solidify what I saw and learned from the past year and a half, so I'll be hopefully ready.

Interviewer: Do you find that the general surgery attendings treat you any differently since you're never going to do a colon operation again, or do they treat you equitably, or hard to tell from your perspective?

David: No, I think they treat me equitably. There's no mystery when you're in the joint program that that's what you're going to do. It's not like when you're a student and you have to tell everybody on every rotation that “I'm interested in something, but I'm open-minded...” Fill in the blank how you want to flatter them so that-- maybe that's why my grades were so bad third year, because I would show up to family medicine and tell them, "I love surgery." They'd say, "Okay, pass." Maybe that was my fault. You're doing what you're doing, you're in the joint program, you show up to a colorectal case. They don't treat you any differently.

I'm not asking the very detailed questions, so they're not giving me the very detailed answers, but that's okay. I'm there to learn how to do this. I'm still taking my general surgery boards, and so after all this time, I do obviously want to do a good job, and they know that. I think that the interactions are good. In a way, I think there's a mutual respect that I sense from them that, okay, you're going into CT, that's great, you're going to hit the gas next year and do that.

I think they respect you that when you move on, you become more of a colleague to them and vice versa. I look at our surg onc and colorectal faculty and knowing I want to cardiac, I respect what they do. I say, "You know what, I'm never going to do a Whipple again but that's hard to do, that's impressive, you do it well, and I respect that." Some day when I'm a CT faculty somewhere and my patient needs some general surgery done, I'll have a good appreciation for what they're doing.

Interviewer: You alluded to the fact that you're chief during a pandemic, how has Covid-19 affected your chief year?

David: Very interestingly. I'd say logistically, in my last two months of cardiac, we had an every week on, every week off rotation. Case volume was purposely reduced, and so it wasn't as busy as it could have been. Right now I'm at the VA and they have an even lower threshold to cancel things, it turns out, and so we actually don't have any cases almost for the rest of the month. We still have to wear a mask in the building even though they don't provide us with one, still have to wear a sticker every day, and there's no reciprocity across the street with stickers. There's two kinds of stickers, different sizes just so they are absolutely sure that even though you're a physician, that you are aware of your personal COVID status.

Things are different. It takes a little adjustment, but all things considered, knock on wood, I'm healthy right now and I think the people at the hospital are healthy, and we've been doing a good job in trying to take care of ourselves and make it easy for people who are even remotely concerned that they might be exposed or infected to

give them an opportunity to sort that out and not feel compelled to come to work, and bear through it, like we used to do with anything else really.

I think things will change moving forward. We are dabbling in telehealth clinic visits now and just understanding what can be accomplished not in person. We'll see what persists. I think the whole world is undergoing a bit of a metamorphosis right now, and so I don't think it will be any different.

Interviewer: It'll be interesting to see what transpires. You also mentioned that when you got here, Dr. Kirk had not yet arrived, and then he came when you were an intern or you were a JAR?

David: I think it was in my intern year, towards the end of intern year.

Interviewer: What changes have you seen since Dr. Kirk took the chairman position?

David: I would say there was an immediate upload of culture, surgical culture to the program. When he showed up, you could tell he was serious. I thought, “he means business.” He had a plan for how every aspect of the department was going to improve. It wasn't just the residency, it wasn't just our cases, it was everything. He cleaned us up a little bit on the residency side and also on the faculty side. He made very clear expectations to them, too, about what your role is here at Duke, and some people came and went because of him arriving.

I think that he instilled a healthy combination of a rich Duke history. The standards that have kept this field alive for so many years -- he's shown us that that still must persist. But also he's open-minded and sees that we have to evolve with the times. I think he appreciates the fact that we have to stay on the front line of everything, and we have to be the innovators, we have to be the leaders, but not forget where we came from and not forget that we're built on chairman after chairman like Dr. Sabiston.

We talk about him like he's still here, in some ways. I think that's good to feel that presence, to know that those people worked through much harder experiences than we've had to, and so you have to do an honorable thing and keep that going. I think it was good. I think he just injected an immediate culture to us. I think we've tried to hold on to that, and we've made it a point that in our chief class to try and maintain that message, all be on the same page.

I think it's been very good, and it's all in the data. When he presents our state of the union every year, you just see we're making huge improvements in our funding, our performance metrics, just every aspect has been improved since he's been here.

Being a chief, when I was admin chief, I had a lot of time each morning early to chat with him. It's good to converge to that point when you can have a conversation with him as a chief and talk seriously about these things and openly, and I think it's good.

Interviewer: Your chief class, at least from the perspective of junior residents, has made a concerted effort to encourage and catalyze these positive changes in the program. Can you talk a little bit about some of the areas that you guys sought to improve and how that process went from you all's perspective?

David: I think one thing we wanted to look at was educational experience for residents. Some of the rotations, we went through one by one, and we wanted to make sure that time was being used efficiently, and if time wasn't to make those improvements, to open up more opportunity for educational moments. We went through a couple of rotations and did that. Also, I think importantly, we created a structure where we got feedback from the residents.

Each one of us designated ourselves as a liaison to the other classes, including research. We really kept an ear out for what was going on their side of things, so it wasn't just “this is the way it's going to be, tough.” We each wanted to hear from them like what was going on. It wasn't an open invitation for an intern to dictate the future of the program, but we wanted to know. Some of the things were things that are just part of the program and you just have to deal with, but other things that were brought up we could make some changes.

Interviewer: Such as?

David: For example, experience of the residents doing any sort of consults and things like that. Just the way they organize their day and do things. It's important to know where the pain points were and to see what we could do to offload some of that, because ultimately if it led to better patient care, we were willing to do it. If the purpose was to lead to more weekend days off then absolutely not.

[laughter]

We picked and chose what was productive points from the juniors, and things that we wouldn't have really appreciated because we forgot about it in hindsight. I think we made positive changes by doing that.

Interviewer: Well, no program is perfect, and looking back on seven years of experience, if you had a magic wand that could fix anything about Duke surgery, is there anything that you would change?

David: Honestly, practically speaking, I'd say no. If I had a truly magic wand, then yes. Wake up at eight o'clock every morning, come in and have a nice cup of coffee, a nice big breakfast, go to the operating room, have a perfectly successful case, come home at 5:00 PM, walk the dog, get a lot of reading done, work on some papers, go to bed at 10:00 PM and repeat that five days a week. If that's what I actually wanted, I wouldn't be sitting here right now.

I think that it's been a very interesting experience over seven years just seeing how your perspective of your own self changes and your perspective of everything

around you is different. You really mature much more than you do in med school. That is kind of an extension of undergrad, whereas here, you get your big boy pants on real quickly. I don't think there's anything I would have changed. I think every hardship, every positive thing factored in in some way that I use to make an improvement. If I had a rough day, I would review that day and say, "How can I make this never happen again?" I think having that stimulus is essential for your own growth. If things were that easy, everyone would do it. It's surgery, it's cool. It's cooler than anything else. Non-surgeons would maybe not admit that, but it's cool stuff. The demands of it are harsh sometimes, and so changing that would be a disservice. For that reason, I would say keep it the way it is.

Interviewer: You mentioned Dr. Daneshmand and Dr. Hughes. Any other pivotal mentors for you over the last seven years?

David: Yes. When I showed up, I met Dr. D'Amico. I think he's provided the highest level of wisdom as to what I need to be thinking about when and how do I strategically progress through these years and set myself up properly. Dr. Hughes has been great. I'd say that some of the junior faculty in CT have also been very helpful. Dr. [Adam] Williams, Dr. [Ryan] Plichta, Dr. [Ben] Bryner, really all of them. You work with them and they've shown you something unique that you can use to improve yourself.

In general surgery, Dr. [Peter] Allen. When he came on board, he was immediately known for doing whipples in two hours, but it was more than that. You actually did those whipples with him, you realized what you were learning was very incredible and important. He would show you exactly where everything needed to go so there was no redoing any movements in surgery. It was you go from point A to point B and that's it. Him showing you that and doing it the way he does has been great.

The surgical oncology faculty, in general, have been good mentors and really make a very concerted effort to teach us. There's a lot to learn in oncology obviously, but they have a conference for us now. Each one talks through the cases. Dr. [Dan] Blazer is always teaching you. They make a concerted effort. Really, it takes a village to raise a resident. There's some people that clearly stand out to me, but really every interaction, some things you retain, some things you don't, but collectively, you figure out what works for you and what's going to allow you to be as proficient as you can be.

Interviewer: Where would you like to go? I know you have two more years here for fellowship. How do you foresee your career unfolding thereafter?

David: I think only recently I really started to think about that because, for a while, it feels like residency is it. This is my career. Now that general surgery is coming to an end, it's sinking in a little bit that I'm actually progressing. I have a couple of years to go. It's not time to look for a job right now, but I'm thinking about where that might be. At this point in time, I don't really have any preference for where I might go. People always ask me, "Are you going to go back to Michigan?" I don't know. I'm not

opposed to it, but I'm not eager to. All my family is there. My wife's family is there. It wouldn't be a bad thing to be back there. But it'd be hard to go anywhere else after that for those reasons. When your parents are then in their 80s, "Hey, by the way, I'm going to California." That'd be a little bit of a tough sell.

I think that going there would be a semi-permanent move, and I don't know if my wife and I are ready for that. However, I don't really know exactly. I am planning to pursue more of a subspecialty in aortic surgery, so that may dictate some of those options.

Interviewer: You think it'll require another year of training or you will be able to get that here at Duke?

David: I am confident I'll be able to get all that here at Duke. I think residents in the past who have also pursued that have not needed an additional year of training. I think you do six or nine months with Dr. Hughes and Dr. [Jeff] Gaca, Dr. Plichta, Dr. Williams. I think you come out more than ready to start your faculty position, which is very fortunate. There are few places where you can rest at night knowing that if you do what you're supposed to do, you'll be ready when you're done. If I didn't know that for sure, I think I'd be a little anxious.

We'll see when the time comes where those positions are and the nature of the game. I've always enjoyed having some nonclinical pursuits, whether that'd be research or innovation or device development, business. Some of those things I kind of dabbled in on research. I'm excited to see where things go from there. I think having an expertise in surgery, you can become a participant in some very interesting projects that are multidisciplinary, even outside the hospital walls. I would look for a job that has that availability, something I can work on at the same time, something that will allow me some growth as a person.

Interviewer: If the past is prologue, I'm sure wherever you end up, you'll continue to be successful.

David: Thanks.

Interviewer: Is there anything I haven't asked you that you want to make sure you get on the record about your time at Duke or your experience here?

David: It's hard to boil down seven years. You could write a book about a week of surgical residency, especially at Duke. I would just say that I guess I'm grateful. That'd be the biggest thing. It's biting off a lot to chew when you're a medical student and you're trying to figure it out.

Interviewer: You truly have no idea.

David: You really don't. You think you do, but you don't know what you don't know, and there's a lot of darkness beyond that candle that you're holding. Once you get a sense of that and you are imprinted from your mentors and you see people

graduating and being as successful as they are, and you see a program that maintains that and a program that puts every ounce of effort into being what it promised to be -- I think each one of us needs to remember that as frequently as possible, because there's a lot of people that would want to be in our shoes and do what we do, especially here. You just have to remind yourself of that.

I'm saying I'm grateful. I actually have my match letter framed and hanging on my wall at home next to my diplomas, because I knew that was going to be an important step. Throughout my career, I'll look back and say, I'm glad I did that. That was not easy, but I'm glad I did that. I think it's important to have those reflections.

Interviewer: Thank you very much. I really appreciate it.

David: Yes, of course.