Paul Brandfonbrener:

Welcome to The Spark, Medical Education for Curious Minds. We present the stories behind the people at UCSF and get to know the human behind the professional. I'm Paul Brandfonbrener, a student in the School of Medicine.

Chloe Sales:

And I'm Chloe Sales. This season we're sparking a new conversation across UCSF. Where do you find joy, meaning, or purpose in your work? So Paul, I'm really excited to hear about today's guest.

Paul Brandfonbrener:

Yes, I had the chance to talk with Justin Sewell, who is the medical director of the Gastroenterology Division at ZSFG. He does medical education research and cognitive load theory, which is something we talk about in our interview. And he also teaches at the university. So he teaches in the REGN block, which is renal, endocrine, gastroenterology and nutrition. He's also the interim co-director for the foundation's one curriculum and the interim director for the physician identity weeks, which are these weeks we get interspersed throughout all four years of the curriculum here, to develop our physician identity, do some career building and as a mental health break as well, which is really nice.

Chloe Sales:

So basically what I'm hearing is if it has something to do with medical education at UCSF, Justin Sewell probably has something to do with it.

Paul Brandfonbrener:

Yes.

Chloe Sales:

Nice.

Paul Brandfonbrener:

That's a great way to sum up Justin. Another thing that I think highlights him as a person, he scheduled the interview before he had to go work at the general, and so he biked all the way to Parnassus, which is a totally different campus, to come just do the interview and then left to bike to work. So going out of his way for students is, I think, pretty much the norm for him, and other people around the university as well.

Chloe Sales:

I would agree. I definitely have seen Justin go above and beyond for his students as well. So Paul, tell us a little bit about how you and Justin met.

Paul Brandfonbrener:

So Justin is, as I said, the interim director of the PI Weeks, the physician identity weeks. So he was directing our first one, which was a couple weeks ago. And at that there was a little bit of a miscommunication where they didn't have vegetarian options. And as a vegetarian, I like vegetarian options. And so he, again, going out of his way, he bought lunch for all of the people who are vegetarian or vegan, and we sat outside in the courtyard and ate lunch with him. And instead of discussing, I don't

know, school or something, he was bringing up the fact that there is this music festival coming to the park soon, the Hardly Strictly Bluegrass Festival. And so we were talking about music tastes, and family, and life. And that was exactly what we all needed after our first stressful block of medical school. And I think he read that in the room, and was able to fit that for us, which is again another testament to his character.

Chloe Sales:

And it sounds like exactly the sort of thing that more and more medical schools across the country are trying to integrate into their medical curricula. Talking about things outside of medicine and how those can help us with wellness in this career.

Paul Brandfonbrener:

Yeah. So I'm so excited for everyone to hear this interview. So without further ado, here is Dr. Justin Sewell. Okay, welcome in to this episode of The Spark. I'm here with Dr. Justin Sewell. Justin, thank you so much for being on today.

Dr. Justin Sewell:

Thanks, I'm happy to be here.

Paul Brandfonbrener:

Before we started recording, we were going through your lengthy, all your different titles.

Dr. Justin Sewell:

There's a few.

Paul Brandfonbrener:

I had to double check I had them right. So you're the medical director for the gastroenterology division at ZSFG.

Dr. Justin Sewell:

Yeah.

Paul Brandfonbrener:

You do medical education research and cognitive load theory.

Dr. Justin Sewell:

Yep.

Paul Brandfonbrener:

You're the co-director of the renal, endocrine, gastroenterology, nutrition block, as well as the interim co-director of Foundation's one curriculum.

Dr. Justin Sewell:

Yep.

Paul Brandfonbrener:

And the way we met was through you being interim director of the physician identity weeks one through four.

Dr. Justin Sewell:

That's right.

Paul Brandfonbrener:

Were you always intending to have such a wide scope of interest? How did that come about?

Dr. Justin Sewell:

No, I mean... Well, I would say that my interests have been influenced a lot by serendipity, and by being at UCSF. I had a history of doing research before med school even, I had an MPH, I found research interesting. I was fortunate to come to UCSF for internal medicine residency, and fellowship, and I was just so impressed by the breadth and diversity of what people do here at UCSF that I hoped to stay on faculty, and I hoped to stay at San Francisco General Hospital. And fortunately those things came about. But I started my faculty job not really having a super clear aim. I had done inflammatory bowel disease research, I had done health services research, and those were all really edifying, but none of them was shaping up to be the thing, like a super strong career path.

So I entered my faculty life pretty undifferentiated. And then basically I turned to education because on June 30th I walked out a fellow, on July 1st I walked in an attending. On July 2nd, I got a couple new fellows and they said, "Here, teach these fellows colonoscopy." And I tried to do it, and I thought, my gosh, this is really difficult. And I tried the same things that I had seen my attendings do, and said the same things, and saw the same glazed expressions on my fellows faces. And I thought, "I have to find a better way to do this." So while this was all brewing, I got an email that said apply for the UCSF Teaching Scholars Program, which is a one-year faculty development, educator development program here at UCSF. I applied, they let me in, fortunately, and that really turned my attention towards education. I realized there was this thing called education research. So that was the spark, if you will, haha, for what I do today. It was never really that planned out.

Paul Brandfonbrener:

Yeah, it's one thing leading to the next, and making most of the opportunities you get. It is interesting how there's so much importance placed on training really good physicians, but there's very little specific training for the people who are teaching them. Can you speak to your process of becoming a teacher and what you went through to try to be able to teach those really challenging things to people?

Dr. Justin Sewell:

Absolutely. I think we have this assumption in medicine that because we are trained as physicians, we can also be educators, we can also be scientists, we can also be administrators, we can also be counselors. And so I think it's a fallacy that a physician should be able to do this without formal training, and that's certainly what I found. So I went through the Teaching Scholars Program. It's a whole year long program. My division chief thankfully gave me a half day off every week from clinical duties to do that. So just an example of the support that an outstanding leader can offer a young or junior faculty member. As I finished Teaching Scholars Program or as I went through Teaching Scholars Program, I developed this research project to start thinking about cognitive load, and how to evaluate that during

procedural training like GI endoscopy. I had learned about cognitive load theory and I was like, oh my gosh, this is exactly what I just experienced as a fellow no more than two years before.

And it was also a very... It's a reductionist, quantifiable theory, as opposed to some of the more sociocultural, more qualitatively focused theories. And so that appealed to me at that time, because I had no training in education up to that point. So I was developing this research study and it was actually turning into a real research study. And then Pat O'Sullivan, who is the lead for the Center for Faculty Educators here at UCSF came to me and she said, "Hey, we have this doctoral program where you can get a PhD in health professional education." I said, "Yeah, right." At this point, I think it had only been at most three years, and I think it was only two years, after I had finished my eternal training. And I was like, "There's no way I'm going to do that." So I went home to my wife and I said, "Hey, Pat wants to meet with me about this PhD program."

And she was like, "Oh, please don't do that." I said, "Don't worry, there's no way I'm going to do that, but I'm going to talk to Pat about it because we have a relationship, and I respect her, and this is really cool that she brought this up to me." So I went and talked to Pat O'Sullivan and a few days later I went back to my wife and I said, "Hey, we need to talk, because it's this outstanding program where a practicing full-time faculty member can also obtain training leading to a doctorate in health professions education program." This is through the... Just another example of UCSF's amazing opportunities is that we have a partnership with the Dutch University, with Utrecht University in the Netherlands, in order to have our faculty earn PhDs in health professions education. So there's others here at UCSF, for example, the associate dean, Karen Howard, was in the class before me.

Paul Brandfonbrener:

Oh, wow.

Dr. Justin Sewell:

And so that was a few year process of doing education research, going to meetings, getting published, developing a thesis on cognitive load theory and how it applies to procedural education. And I came out the other end of that really a totally different person. While all that's happening, UCSF is also developing the bridges curriculum. And I had been teaching in the class that preceded regulation in the old curriculum. And so I think I just signed up to go to meetings, or retreats, or something, and ultimately got invited to be a course director for that course, a co-director with Tracy Fulton. And so that got the UME pathway going, and just one thing led to another. And there's such a rich community of devoted educators here at UCSF, and such an infrastructure to support UCSF. I always say in my interviews with med school applicants or fellowship applicants that UCSF really values education and practices, and shows evidence, tangible evidence, of the value. So it's been a great path. I feel very, very fortunate.

Paul Brandfonbrener:

Yeah. For the listener and maybe the host, could you discuss more about cognitive load theory and give us a quick intro?

Dr. Justin Sewell:

Yes. Prior to entering the doctoral program, or prior to entering the Teaching Scholars Program, I guess I had no idea that education theory existed either. Education research, education theory, I had no idea. I was rather uneducated about this. So there are a variety of different groups of learning theories. Cognitive load theory, as the name implies, is a cognitive learning theory, meaning it looks at what are we doing in our brains to learn, as opposed to sociocultural theories that look at the influences of our

environment, or interpersonal relationships. So cognitive load theory is really focused mostly on the individual, and what they're doing with their cognition. So the idea is that there's three kinds of memory. There's sensory memory, which is everything we can sense, which is more or less infinite. There's long-term memory, which is everything we can store in our memory, which is more or less infinite. If I played you a song that you listened to as a kid and that you hadn't heard in 15 years, you would instantly remember the lyrics and the tune probably.

Paul Brandfonbrener:

For me it's 1985 by Bowling for Soup.

Dr. Justin Sewell:

Yeah, exactly right. But what is the bottleneck for learning is the working memory. So in between sensory memory and long term memory is working memory, and that's anything you can focus on at any given time. And that's really limited to theoretically seven plus or minus two elements. That's legendarily why phone numbers are seven digits long, although I'm not sure that's really true or not. And under complex learning settings like medical education throughout, it's really probably more like five items, plus or minus two. And so the idea is when that working memory becomes overloaded, a learner can no longer learn or perform. Basically, they're cognitively overloaded. So that's the basis for it. Cognitive load theory goes a step further and looks at how you're using that working memory, whether you're using that working memory to complete a task, to learn from the task, which are two related but separate things.

Or if you're using that working memory on something else, like a distraction, it could be an external distraction, like there's people walking by and you keep looking at them, or it's an internal distraction, like you had an argument with a loved one and that's on your mind. That takes up space. And so ideally, we want to minimize extraneous load because that's unproductive. We want to match the intrinsic load or task difficulty for the learner. So I want to give you a learning task that's not too hard, or else you're going to be overwhelmed, but not too easy, or else there's nothing to learn. It's in that sweet spot. And then we want to promote germane load. And the final part of cognitive load theory is germane load, where you're connecting pieces of information to what you already know and forming learning schema. So the example I often talk about is driving, driving for people who know how to drive and are experienced, you can do it autonomously, you don't need to think.

You can be weaving through traffic, hopefully not looking at your text messages, but maybe sometimes talking on the phone, thinking about something else, programming what music you're going to listen to. And if a car pulled out in front of you, you'd hit the brakes. But for a new learner, all those steps are... There's dozens of steps in there. And so when you learn to do these things with facility, you're forming learning schema. And so the difference between... Another way of thinking about it terms of driving, if you're using Google Maps to navigate, you will accomplish the intrinsic load of getting from... You'll accomplish the task, getting from point A to point B, but you might not actually learn how to get from point A to point B because it's doing it all for you. So that's the idea of cognitive load.

Paul Brandfonbrener:

How does that... So in a setting for me as a first year student, we're given a ton of information. How does that five plus two or seven plus two, how can we implement that? Or are there ways that you've been implementing cognitive load theory into that type of education?

Dr. Justin Sewell:

So cognitive load theory is most richly studied in more of a classroom environment than in the workplace. My research was looking at the workplace, but most of the origins come from cognitive psychology, and so they're studying it in the classroom. And so I think there are aspects of what teachers can do and aspects of what students can do or learners can do. I think from the teacher's standpoint, it's really important that we pace the material so it's not too fast, that we provide... That we scaffold the materials. So we give you the foundational information and build on that and build on that, so that you're starting to build up those learning schemas. Even as mundane as our slides, you know when you see a slide that has some crazy figure, and you realize you're not actually listening to the lecture because you're looking at that figure saying, "What is that?"

Or too many words on the slide, we're going to start starting to read the words. And we can also give teaching tools. So we can give you teaching tools that you can use so you don't have to memorize it all. So an example from our course is, you will see, is the infamous metabolic map, which is this giant map of all the biochemical processes occurring in the human body. And the idea is you don't have to memorize that stuff, you can use your map. Also on the exam, just so you know. So that's what teachers can do amongst many other things. I think for learners, one, I think the thing that's most... So you can't control what the teacher's doing, obviously. I think to reduce your extraneous load is trying to center yourself and be present in class, and it's putting away the phone, and turning off iMessage, and resisting the urge to go look on Instagram or Twitter during the lecture.

For me, I mean different learners are different styles. For me, I think it's important. I think for me it's better to actually pay attention and focus less on taking notes, because all the information you need is going to be there anyway. So I think it's more about trying to keep yourself focused, minimizing distractions during the session, I think. Later on studying is a whole different thing, but in the moment when you're attending a session, it's trying to say centered and focused. And that's also partly trying to minimize the voice inside yourself that's saying, "This is too much. I can't handle this. This is overwhelming. How can I ever learn all this?" Because you will.

Paul Brandfonbrener:

Yeah, that's one thing I really appreciated was it seems like the curriculum is so well thought out, where it's overwhelming at first, but then you keep seeing it again. And if it's important you'll see it again. And by the time an exam comes around, you feel like you know what you're doing. Hopefully.

Dr. Justin Sewell:

Right. And we really are focused on application over memorization. I mean obviously there's some things you have to memorize, especially things that you need for an emergency situation, like your ACLS protocol. But that's for the workplace, not for the classroom. But if you know how to apply and how to clinically reason about the information, then when there's things you don't remember, you can look them up. And over time, as you go into your chosen field, you're going to revisit or spiral back to the same concept so many times that you will learn them. And so even in my own practice, having seen GI patients now, or patients with gastrointestinal disease, for 11 years plus three years of training, the cognitive load of managing those, the intrinsic load of managing those conditions, 90% of the time is really low. And that's actually given me much more time to focus on the person in front of me, and less on the diagnosis on the computer, or the information on the computer. And so it's actually made my clinical care much more satisfying. I feel a lot more connection with patients.

Paul Brandfonbrener:

Oh, that's awesome. But it just takes time and it's that experience to build up.

Dr. Justin Sewell:

It takes time. But of course I could still be not... It still takes a concerted effort to be present, and to minimize those distractions that are on my mind, like who's next on my schedule? How many more people do I have to see? What's happening my personal life.

Paul Brandfonbrener:

So we've talked a bit about your path once you became a doctor. What we've learned from previous guests is that the path to medicine is rarely a straight line. Would you be able to talk a little bit about your road into this field?

Dr. Justin Sewell:

I don't think I ever considered any other career besides medicine. Evidently I told my parents at age upper single digits or low double digits that I was going to be a doctor. I don't remember that cognitive decision. I know that I was told a lot about my birth, which I was two months preemie, and I was very low birth weight, and I had a very high chance of not surviving, or having severe cognitive underdevelopment. So maybe that played into it. And then I floated through school, I floated through college. I did not have that impressive a resume. I actually didn't get into med school the first time, which was very crushing at that time. I then turned myself to, I guess I would say professional development, got a master's degree in public health. I learned about research. I really spent two years growing a lot, and reapplied and got into one medical school, where I really struggled during the classroom years too.

During the pre-clerkship years. I mean, I passed. And then finally when I got to the clinical workplace is where I thrived and found I had hit my stride. It was really hard for me to learn how to study, I just didn't know how. And that fortuitously led me to UCSF for residency, and then fellowship and then beyond. And so I reflect on that setback of not getting into medical school the first time and realize that if I had, I would've had nowhere near as much personal and professional development. And I think it highly unlikely that I would've been competitive to come to residency here. And I probably would not be doing all the things I do now. And so I obviously wouldn't go back and change it if I could. And I used to feel self-conscious about sharing that story because I think we're used to people always looking like they have it all together, right?

Paul Brandfonbrener:

Yeah.

Dr. Justin Sewell:

All your classmates look like they have it all together.

Paul Brandfonbrener:

No, it does.

Dr. Justin Sewell:

They're not struggling. They're doing just fine. Why am I the only one struggling? But more and more I think it's so important that we talk about these things, because all of us are going to struggle multiple times, or repetitively throughout our lives. And the extent to which we're able to use those things for good when possible, it's just not to minimize true traumas and struggles that other people have gone

through. But the more that we can find ways to use those to our benefit, I think hopefully we can use them for professional growth. I was fortunately able to. I feel very, very grateful.

Paul Brandfonbrener:

I feel like in the moment when something like that happens, it's so hard to see how this could be a good thing, but it's so valuable and I really appreciate being able to share that now. Because I have so many friends also going through the process, and thinking that everything relies on if they get that acceptance right now. And you're such a great example that there's so much that goes into an admissions decision, that it's so random, and it doesn't indicate if you're a good person or not or if you're going to be a good doctor or not. But it's so hard in the moment to get away from that perspective.

Dr. Justin Sewell:

Near the end of residency, I learned that there was one faculty on the residency selection committee who really believed in my application. And according to him, he basically fought for me to get on the ranked list. So it's like this one person. And then back before that, I had one person who was my mentor during the MPH program who really took me under his wing as a physician. He was an attending, and I was totally clueless. And so if not for those two people, both of which were by serendipity, I presumably would not be doing what I do today, which is remarkable.

Paul Brandfonbrener:

Yeah. People we've interviewed before have had such similar stories. And this leads us to our main thesis of the season, too, which is where you find meaning in your work. And I guess seeing as you have such a big role in the medical school, educating and mentoring so many future doctors, where do you find meaning in all these positions you have?

Dr. Justin Sewell:

I find meeting in mentoring or helping other people, I mean that's the reason a lot of us going to medicine, maybe not the mentoring part, but the helping and promoting health, or helping minimize the impact of disease. Ultimately, I think it comes down to relationships, and knowing people in whatever capacity and being able to help ease their path. Whether that's a patient, helping them feel better from a gastrointestinal condition, or just meeting them for 15 minutes before a colonoscopy and helping make the experience pleasant, and try to relieve anxiety or stress about it. Whether it's supporting the faculty in the gastroenterology division at San Francisco General Hospital. I had a big role in easing their experience through COVID as we transitioned to the Epic health record. We try to improve processes there. And then in the education sphere, I mean, I love the direct interaction with students, whether it's in the lecture hall, or it's in the small group space.

I love seeing the pieces click, or seeing those learning schemas start to form. I mean, I even, this is going to sound bizarre, I even love it when I'm grading exams and there's this perfect answer. I'm like, this person really got it. They put the pieces together, they understand gallstone disease and the biliary tract, or whatever. I get great joy from mentoring. I do more mentoring people on education research now than doing my own education research, because these other roles have taken up so much bandwidth. But it's really being able to promote someone else in the education sphere. It's being able to positively promote someone else's professional growth, and help them find their path as a physician, not because they have to be a gastroenterologist or they have to do education research, but being able to be a positive force in promoting their growth and seeing their satisfaction, sense of accomplishment, those really bring me joy.

Paul Brandfonbrener:

Yeah. So it seems so full circle, too, because you have those people that gave you that shot, and now you are being able to return that. It sounds like that you provide support to a ton of people. Does that ever get tiring, or how do you keep that going for yourself?

Dr. Justin Sewell:

I mean, I think all of our jobs are borderline overwhelming. For me, there were certainly times in my career over the past 11 years where it's been rather overwhelming. Part of what keeps me well is attending to my own mental health, managing my own challenges with anxiety. That's been super helpful, getting treatment for that. Obviously we talk about work-life balance all the time. It's cliche. My approach is when I'm at work, I work really, really hard and just 100 miles an hour. And then when I leave work, 95% of the time I leave it at work.

So I personally don't keep working on emails at home. I rarely do much work on the weekend. I have a family, three kids, a spouse, a dog. So I work long hours. I mean, I'm usually doing 10 hour days, and so when I come home, they expect me to be home and present. And having them need me to be present really helps me, because at times when everyone else is out of town for some reason, I just go home and works some more. So for me, it's been attending to my own mental health, my physical health, getting regular exercise, spending time with friends. And then when I'm at work, really working hard. I pride myself on efficiency and getting things done efficiently. And now I'm starting to ramble.

Paul Brandfonbrener:

Yeah, no, I think one of the first impressions of you when we first met was you seemed just very balanced. Because one of the first things, we were busy in one of our first blocks, and you were sending out an email about that you're going to Hardly Strictly Bluegrass, the festival in the park.

Dr. Justin Sewell:

Right.

Paul Brandfonbrener:

You're giving people concert recommendations.

Dr. Justin Sewell:

Yeah, yeah.

Paul Brandfonbrener:

And I was like, wow. He's like a successful physician, teacher, researcher, and is going to concerts, it's like great music taste too. Where did you get that perspective to realize how important that was?

Dr. Justin Sewell:

It has been a combination of treating my mental and physical health, but also just doing personal work to understand who I am and what I need, and maintaining my job is super, super important, but not the only thing. I think when I was in training, or when I was aspiring to be a physician, when I was training to be a physician, and I think early in my career, I would say my identity was wholly defined by my job, and that led to imbalance. Now my job is an incredibly important part of my identity, but it's only part.

And so the things that I do outside of work like cycling, like music, like my family, soccer with my kids, are also part of my identity. And so that helps me keep in balance. I think it's much easier to attain this when you're more established. Especially in med school, or in residency, or in fellowship, or even early in faculty, we have a lot less certainty. There's a lot less stability, and so you have to stay on top of it. And I think now that I have a modicum of stability, that has allowed me to not always focus on that, and to find more balance.

Paul Brandfonbrener:

Do you have any suggestions for people in that earlier stage of their career to find balance? I guess it's different for each person, but now that you've gone through it, looking back, are there ways that you feel like you could have found balance, or you found balance in that?

Dr. Justin Sewell:

It is definitely going to be different for every person, and I think continually reminding yourself that your path is going to ultimately work out. You can't actually control it as much as you try. When I was a fellow, I had a particular mentor who has done great things in the gastroenterology space, John Inadomi, he's now the chief of medicine, I believe, at University of Utah. And he was the president of the American Gastroenterological Association, and he always had this very inquisitive, curious outlook. And one time I told him when I was a fellow, I said, "I just want to know that everything is going to work out. I want to know what I'm going to do in 10 years." And his response was, "Justin, if I had to come to work every day knowing what I was going to do and what would happen, I would quit."

And I thought, "You're crazy. What you want is that certainty so then you can relax." And now I totally agree with him. I think it's really fun to see what's coming on the horizon, but I can only appreciate that because there's a sense of stability. And so there's not going to be a super sense of stability in medical school, or residency, or fellowship, or even in your job sometimes as a faculty member, or an attending physician. And so I think to find that balance and to just... Sometimes we just have to cognitively tell ourselves over and over again, "This is where I am right now. I can't change where I am. All I can do is make my best effort going forward." It's like there's things I can influence and things I can't, and so I'll do the best on things I can, and try to not perseverate or stress about the things that you don't have control over. But that's easier said than done sometimes.

Paul Brandfonbrener:

Being in the moment and enjoying the process, because you never really know what's lying ahead. And for you, a lot of your career is based off of getting an opportunity you didn't really predict for yourself, and then seeing where that leads and that's something you wouldn't get if you're just focusing on one end line.

Dr. Justin Sewell:

I wish I would've been more in the moment in med school. I wish I would've. I wish. And probably a lot of people 10 years out of training would say this, but I wish I had spent more time appreciating what was happening, instead of always looking to the horizon for the next thing.

Paul Brandfonbrener:

Yeah. I think all of our listeners can take that too. No matter what you're doing, not even medicine, appreciate where you are in the moment. Everything will work out. But thank you so much for being on. I've really enjoyed this conversation, Justin.

Dr. Justin Sewell:

Yeah, me too. It's been fantastic. Thank you.

Chloe Sales:

Wow. Thank you for that interview with Justin Sewell, Paul. I think one line that really stuck out to me was, "No one has it all together. You are not the only one struggling." And I was curious as to what your thoughts were about that.

Paul Brandfonbrener:

I think that was such a great line to hear, especially at this point in my medical education, where you come into this school and you feel all this pressure that you have to know everything, or pick up stuff really quickly, and that everyone around you knows everything too. And hearing them say that really no one, even an attending or somebody who's been in the field that long, that everyone is still working through their challenges, and still learning was really empowering. And I think hearing people in those positions being that real and honest, it's just a really powerful thing to hear. And I really appreciated him saying something like that.

Chloe Sales:

Absolutely. I agree. I think even having one role model be honest about their struggles goes a long way. And it also made me think about something else Justin said, which was all he needed was one person to fight for him when he was applying to medical school, or applying to residency. And on the flip side, it made me think, well, you only really need to fight for one other person. You don't know whether they're struggling, or what they're going through, but if you're fighting for them, you can be that person who helped Justin get to medical school, or helped the next round of pre-meds become doctors.

Paul Brandfonbrener:

Yeah, I really love that insight too. And it really shows just how supportive the UCSF community is, as well as a lot of other people in medicine, where this idea of mentorship and supporting others, and bringing other people up is in the forefront. And it really highlights the importance of just relationships in all fields, but especially in medicine, both between each other, as well as with your patients. So I think as a leaving note for our listeners, keep in mind the people that you can bring up with you and support throughout their struggles, and who you can look to for support. Because all it takes is one person to take a big leap forward. And thank you for listening and make sure to catch our next episode of The Spark.