

SOS#22: \$20M Raised, Lives Saved, and Unstoppable Resilience with Oriana Papin-Zoghbi

Oriana Papin-Zoghbi: 0:00

What we're developing is a really, really accurate blood test so that when that woman is showing up right at that first appointment, right, she's getting a blood test that can help guide her care to the right physician, to the right specialist, to the right surgery much, much faster and help really increase that time to survival a biotech entrepreneur on a mission to transform women's healthcare.

Marcus Arredondo: 0:23

As the CEO of AOA Dx, she's tackling one of the biggest gaps in medicine early detection of ovarian cancer. But Oriana's journey isn't just about science and innovation. It's about resilience, adaptability and defying expectations. While eight months pregnant, she bravely navigated Y Combinator, gave birth four weeks before Demo Day and managed to pitch and raise \$5 million while caring for a newborn. In this interview, she candidly discusses the challenging period, the support system that sustained her, and her efforts to find a balance between motherhood and the demands of a rapidly growing startup. We also dive into the brutal fundraising landscape of 2023, how she navigated the Silicon Valley bank collapse while keeping her company afloat, and why she's relentless about pushing for real innovation in ovarian cancer detection. Her story is more than just about business. It's about breaking barriers. Let's start the show. Oriana Pappin, thank you for being on, excited to talk.

Oriana Papin-Zoghbi: 1:14

Really great to be here. Thanks, Marcus.

Marcus Arredondo: 1:16

Well, I want to dive in because this is sort of relevant to me personally. My wife had our first baby an only baby two years ago and it sort of resonated with me because I know I want to talk about AOA Dx. I think there's a number of other prior companies that you've been involved with as a founder leader in that shaped your journey, but I find the confluence of having a child and fundraising at the exact same time something I could not stop thinking about. So I wanted to just jump in and also just to note that it you know who you were raising from and who you're presenting to, I think is a really important thing. So I'll let you run with that, but I'm super excited to hear about that process.

Oriana Papin-Zoghbi: 2:03

Yeah, digging right in. So when I started AOA I co-founded the company, I was not pregnant and did not have on my horizon to think let me have a baby now, just as I'm starting this company, the best laid out plan don't ever go to plan. So I'll start by saying it was not my intent to get pregnant and have a baby while I was raising my first round of funding. That's just the cards that I ended up being dealt with, and it was no easy feat. But I will say it was masked under the COVID time, where I looked like this for most of the time and I wasn't on the road. Nobody knew I was pregnant until well after I had had my baby. That was the benefits of sort of being in this remote world. I didn't have to travel for so many investor meetings, and so it was interesting. The biggest impact we had was we ended up doing Y Combinator and, again

because it was COVID, unlike most of the YC batches, we didn't have to go to San Francisco. I'm New York based. We didn't have to go to San Francisco, which was a blessing because, had I, I was eight months pregnant when we started, like I was due to give birth halfway through the batch, like I would have not been able to do YC at the time. And so I think there was, you know it was granted this opportunity and we decided to do YC and I remember there was something on the application which was like is there anything going on in your life for which you will not be able to complete YC? And I was like, no, I'll be fine. And so we ended up doing it and I had my baby the last four weeks of YC and I had a really incredibly supportive YC partner Serby she sits on my board today really incredibly supportive YC partner, serby she sits on my board today who gave me plenty of options of like how I could go on and either do Demo Day or postpone my Demo Day. Like there were options you know, given to me, but in the, in the theme of resilience, I was like, no, I think I can do this and I also have the best co-founders. So I ended up having my baby about four weeks before we pitched demo day and we can talk about like you know how, how I had a plan for that. But I had a plan for that and if everything was well, healthy, wise, and I delivered my baby well and she was healthy and I was healthy. Then my expectation was that I was going to come back in time to pitch demo day and thankfully that ended up happening. And again we were online. So I ended up pitching Demo Day with a four week old and raising \$5 million off the back end of that a couple months later. So it was wild.

Press cmd⌘ + p or ctrl + p to print this transcript. Sharing with one or two friends is ok. Posting on the internet is not.

Oriana Papin-Zoghbi: 4:35

I come from like a Hispanic, middle Eastern background, so it's very common to have like multi generational homes. I called in my entire family, like I'm talking to my mother, five aunts, like everybody, came to my two bedroom apartment and was helping me um friends and, like you know, we called in all of the reinforcements, um, and yeah, I ended up raising \$5 million um, and then continuing to build the company after that. And now I will say this having a toddler plus being back in the world of like traveling, I think is harder than like a newborn in the comfort of the remote world. So it's just, it's it's different and it's hard. All the time Found a way to make it work.

Marcus Arredondo: 5:18

Each of those is no small feat, but to do them at the same time, I think, is considerable. So I think it's worth noting that. What year was this that it took place?

Oriana Papin-Zoghbi: 5:25

2021.

Marcus Arredondo: 5:26

2021. So still mask wearing. I'm assuming the delivery process was under lock and key type of situation because of yeah, thankfully my husband could be there.

Oriana Papin-Zoghbi: 5:36

I wasn't part of the ones where, like, not even your partner could be there, but it was like only my husband could be there. Nobody could visit. Everybody was in masks. My family that came to town to help had to

quarantine for a few days before they could come and be with the baby and help with us and quarantine back on the way back out as well, so it was like a really heightened health wise all around us.

Marcus Arredondo: 5:57

You know, I it's. I started to see my friends. I'm probably among the later of everyone who started to have children, but I started to witness a little bit more of it. And I I'm probably among the later of everyone who started to have children, but I started to witness a little bit more of it. And if I'm going to be completely honest, I think early in my life I was probably part of an older line of thinking, completely oblivious to really what the challenge is for women and to see that unfold. I guess having backup is huge, right, having friends and family that come in, but that's only part of the equation. I read and this could be incorrect but you took two weeks of maternity leave, correct?

Oriana Papin-Zoghbi: 6:33

Yes, I want to be clear that I don't recommend it. It was my circumstances. I'm not promoting no maternity leave.

Marcus Arredondo: 6:40

Well, look, I mean you sink or swim, right? I mean, this company is your baby as well in a professional setting, and you devote a considerable amount of your energy toward it and it's not, you know, you can't just abandon it. I think it's difficult for people who are, you know, in a traditional salaried role, where you know either they're checking boxes or they need to do a certain sequence of steps and they're solving within these confines. You're exploring, you're, you're, you got a machete and you're hacking away in the, in the wilderness, within the light, uh, trying to figure out what your next step is, and you've got a whole slew of people who are counting on, uh, what you're going to do. I guess my wife only had, I think, five weeks or so, uh, four weeks. She had to get back into it, and it's tough. I mean, we didn't have family out here, although we did, there were some family that came in and that was a huge help, but we were, you know. It sort of reminds me when you're building furniture and you've got, you know, a bookcase that's about to fall over and all you need is the pliers, and the pliers are just out of reach and you're just trying to keep things up as much as you can.

Marcus Arredondo: 7:46

What's your take on? I guess? I mean, this is a broader sort of question, but I know that a lot of companies sort of roll their eyes at the maternity leave. How do you, I guess, balance that approach, especially as a founder, and the responsibilities you take? And a testament to your team right, that you had good co-founders and a team around you that helped to support that. But what do you think those who may be considering going into an entrepreneurial path need to know, should be asking themselves, because, like you said, whether you wanted to have a child here or at another time in your life, there's no ideal time to have a child, right? I mean, it's never going to be perfect. And you alluded to the plan. Everybody's got a plan until they get punched in the face, and that's what a startup world is. What advice would you give or what insight would you provide to somebody that's going down that path to stay sane, to stay with your priorities intact, you know? Is there anything, any takeaways, that you would share?

Oriana Papin-Zoghbi: 8:50

Yeah. So I will start with saying sort of, the founder role, especially in an early startup, is very, very different to maybe a corporate role in a steady job. So what I will share I think is very relevant to the founder startup life and I don't think we'll translate the same. When you are like an employee or established like I can tell you who works at a large pharmaceutical company very, very different story, even if I'm the birthing parent and he's not. So for me, I think what made the world of a difference was I wasn't an N of one like I. We were three co-founders and we were. We were a unit that was built on so much trust and reliability, which did not happen in the six months prior to this founding the company. It had happened over a 10 year period of us working together before we ever co-founded AOA, and I have a whole theory on friends that start companies together versus colleagues that start companies together, and it's fundamentally different. But we had worked together for a decade and so we knew how we worked, how we managed each other's responsibilities, and so there was an incredibly strong foundation for which AOA was being built on.

Oriana Papin-Zoghbi: 10:06

The second layer to that is that I am an obsessively insane organized person. Annie and I, who introduced us, are the same in that sense we are hyper-organized. We really methodically think things out. That's why when I have a plan and things don't go to my plan, I'm like what's happening? Universe, sure, but at the very minimum. You know, I spent a lot of time ahead of me taking those couple of weeks off, really thinking about what did I think I was going to need? And I got there by talking to so many other women that were founders, that had their babies on the early days of building their company. So I reached out to people in YC, I reached out to people just in my community and I was like hey, who?

Marcus Arredondo: 10:51

do you know that had a baby early?

Oriana Papin-Zoghbi: 10:53

on. Who do you know that had a baby within a first year of their company? Who do you know that had a baby while they were trying to raise money? And I got so much advice and I heard so much feedback and I took that right. Everybody has their own perspective and I said, okay, how does this apply to me and how would I like to apply, how would I like to create something?

Oriana Papin-Zoghbi: 11:14

So I had what I call like my maternity transition plan and that outline what am I working on? And every week leading up to the birth, about eight weeks prior, I would update it so that, if by anything happened and I was out like everybody knew what I had on my plate. From there, I also had a. If things go according to plan, this is how I want you to communicate with me my first two weeks, my second two weeks, et cetera, et cetera. If things don't go according to plan, this is who I delegate to, and it was very, very clear from the beginning right, there was no, there was going to be no scrambling. Let's say, I had an emergency postpartum complication and I was going to be offline for demo day. It was very clear who was going to pitch on my team, right, and so there is. That gives. That gave me a sense of comfort and stability of saying, okay, even if things don't go to my plan, I know who's going to take over at the next stage of the journey.

Oriana Papin-Zoghbi: 12:05

And then the third part is asking for help, right, whether it was that part of advice or asking for family, like really asking for your partner, whatever your circumstances can afford you. Like we didn't have the money to have a night nurse or, to you know, have full time round o'clock care, like that wasn't an option for me, but I have an aunt who lives not so far away who could move in with me literally for three months and help. So it's making it's having the comfort to make that ask and realize that you don't have to do all things. Even I think the guilt comes more when you're a mom, like as a mom you don't have to do all things right. And I learned this kind of along the journey, especially now that my daughter's older, that for me motherhood has become about quality of time rather than quantity of time. Like I will never win the game in quantity I will never but I try to be purposeful from a newborn to toddler age as to when I spend time with her, what do I do with her? How do I dedicate that time to her? How do I try to limit my screen time with her? How do I? Actually I'm not that parent that's constantly on their phone around them. So, you know, I and I think those little things ended up adding up right in.

Oriana Papin-Zoghbi: 13:08

In an ideal world, I would not have taken a couple of weeks like I. I wish I had taken more time. By the time my co-founder went on to have her baby thankfully the company had grown to close to 20 people that she took three months of maternity leave. Yeah, my co-founder Alex had his wife, had his baby. He was able to take three months. We ended up standardizing the leave at the company and I hope that by the time I take my second I'll I don't know if I, we'll see, but I hope that I can take a little bit more time. But that's what it's different, right? One year in, not even nine months into starting your company and raising money for the first time, when you're all living off of your savings. It's to juggle both in like an ideal way.

Marcus Arredondo: 13:49

For sure. Well, I want to talk a little bit about obsession, because that's a very common theme among many people that I speak to that are leaders and founders. But before we move on, I really want to dive into your presentation of Y Combinator. Y Combinator is not anything to scoff at. I mean, that's a pretty prestigious opportunity that not everybody can say. And just to present right and then to actually be awarded investment is something different. So I wonder if you can just share with us what you were like leading up to it, how you put the presentation together, what that process was like, what your state of mind was and sort of what took place after that mind was and sort of what took place after that.

Oriana Papin-Zoghbi: 14:32

Yeah, so the YFE program is about three months and it really is guided to. The first two months are building and the last month is working on your narrative.

Marcus Arredondo: 14:43

Let me interrupt for one second. Can you give a brief background on Y Combinator for those who may not be familiar?

Oriana Papin-Zoghbi: 14:47

Yeah. So to start from the top, why? Combat is an accelerator and and it claims to be one of the top accelerators in the world, which I would agree with um primarily focused at founders that have really early ideas, that have probably never raised money before, to give you this like accelerated, uh, a program of get shit done in a small period of time to prove that your idea is more than just an idea and go out and

raise money on the back of that. And so you are in cohorts and then you're in batches and then inside your batch you have your own section, so there's a small group of you that are working within the same world. For us it was diagnostics and devices, because we were on the healthcare side, and you work really closely to set very tangible goals that you're trying to meet every two weeks. The sprints are so fast, so you're working so hard overnight, like over time, you know, to make sure that you can accomplish what you want to accomplish. In the first eight weeks the program is about 12 weeks, so the first eight weeks we really define. What is it that we want to accomplish? How do we show that our idea is more than an idea? And then the last four weeks was going to be the time that we were going to be building the deck, except those were exactly the weeks that I was having the baby. By the time it was time to start working on the deck was exactly when I was going out to have my baby. So I left my co-founders, Anna and Alex, sort of really clear on the vision.

Oriana Papin-Zoghbi: 16:15

Remember, the YC pitch itself is one slide and 60 seconds. It is insane how much you overthink one slide and 60 seconds. But off of the back of that, you need a few more slides for the follow-on conversations that ensue. And so, um, we came back and had to like, with a record turnaround time drilled down to what it is that we wanted to say, and it was so much iteration. It was so much iteration with our batch mates, it was so much iteration with each other. It was recording videos and practicing, and again getting obsessed with what this one slide was going to look like and what my exact words that we're going to say. Like I rehearsed so many times that I had that those 60 seconds of words memorized in my brain. And, um, getting to the point where, like you, were choosing every word so carefully until you felt that you were putting your best foot forward.

Oriana Papin-Zoghbi: 17:08

Um, so then I come from a sales background, so I have a lot of experience and, I would say, comfort pitching and telling a story and like getting up in front of people, so I don't struggle as much with like performance jitters. And this again was easier because I was behind a screen and not standing up in front. My co-founder flew in, so it was really nice. We were in the same room and you have like this ticker coming up and you have all this behind the scenes production and like you're being queued up to go on, and that's kind of when the nerves start to ramp up. And so I ended up pitching my 60 seconds and then the minute you hang up, there's this ticker of how many people like your presentation and it's insane. It's so nerve-racking to be like I am being judged. In the moment I can see that ticker going up or that ticker not really going up.

Oriana Papin-Zoghbi: 18:00

Thankfully it translated into a lot of leads and what came from there was we had to go in and schedule. I think we had over 100 different inbounds that came in from that 60 seconds and then you have to go and schedule. I think we had over a hundred different inbounds that came in from that 60 seconds and then you have to go and like schedule meetings with all of them or vet them and say who's the right fit, who's not the right fit. So it was like a high pressure cooker situation. It doesn't end when you pitch like you have to close the money. When we closed the money, I think we took a moment of like sigh of relief Okay, we have the money in the bank. But that even can't last that long, because now you have to spend the money effectively in order to hit milestones before you run out of money again. So there's no real like oh, I'm chilling, now I got money in the bank Like that has. It's been almost five years and that has yet to happen in the existence of AOA.

Marcus Arredondo: 18:43

I don't think that ever really happens, if you're being true to the vision, right. But I do want to talk about raising capital because I've. You know it's super exciting to have interest and when you first start getting that interest you think, okay, we got something here, we're going to go forward. And you know, a lot of that interest can be looky-loos, a lot of that interest can be not ideal, and I'm just wondering if you could share a little bit about how you viewed identifying strategic partners, what came forward as you were talking to people and what identified as standout good partners and why and why those who were not didn't fit.

Oriana Papin-Zoghbi: 19:23

Yeah, so this is a little specific to Y Combinator, but Y Combinator specifically attracts a huge range of investors, everything from angel investors so individual, who invest their own money, all the way to investors that are real generalists that invest in everything from chatbots and SaaS to like drug and therapy so really, really generalist. And then you have specialist investors, some that only invest in tech, some that only invest in bio, for example. So the first thing we had to do was really understand who everybody was right and make sure that we were not biasing anything, because maybe generalist investors would never be interested in something as technical as AOA. That's not fair. So the first thing we did was sort of anybody that was only tech investor that had never invested with bio probably was not going to be the right fit for us. We could have been like the one exception, but like the bar to get through would have been so high, so we maybe didn't prioritize that area. So where we focus was who has a deep rooted understanding and what we're doing and who who matches that deep-rooted interest and mission in what we're doing as well. So really those that are aligned and have expertise in what we're doing.

Oriana Papin-Zoghbi: 20:36

And then I would say we very equally spoke to angel investors as well as to fund. You know those angels. Some of those are your most earliest believers. Those are the ones that give you money, basically on you and the team that help fill up your round and eventually end up swaying the others to come on because all of a sudden, your angels are, you know, taking up a good chunk of the round and now others want to play.

Oriana Papin-Zoghbi: 20:57

It's all about FOMO and fundraising, and so we really focused on understanding who we were talking to on the other side of the table. The advice that we were given early on that we still apply to today is that, like, investors are diligencing you just as much as you should be diligencing investors, right? We would also speak to the portfolio companies that they had invested in. Like the YC Resource Bookface. You can go in. You can see what other YC companies are saying about these investors. It's not always great, right, because some people are not always nice, and so we really prioritize, like, who was mission to line? Who really prioritize, like who was mission to line who had expertise?

Marcus Arredondo: 21:34

in our space and who wasn't an asshole? Sorry, I swear. No, you definitely can. You be you and you know that's real. There's a lot, of, a lot of those types of investors and it's challenging to work with them. So this was that. That raised was in. That first raise was in 2021, correct, yeah? And then you had another in 2023.

Oriana Papin-Zoghbi: 21:53

Yeah.

Marcus Arredondo: 21:54

Very different time periods. Yeah, for those who may not be familiar, but 2021, there was a lot of money floating around. Valuations were extraordinary, there was a lot of excitement. Investors had to your point a lot of FOMO wanted to get involved. 2023, interest rates were on the rise at a more aggressive pace than we've ever seen before. We had inflation at very concerning levels and investor behavior was very different. I'm wondering if you could just share what that experience was like.

Oriana Papin-Zoghbi: 22:30

Yeah, so I believe we got funded out of YC because we were a really strong bet and because people were throwing money at anything in 2021. That's just a reality, right? Yeah, I think those of us that successfully raised in 2023 are a testament to which one of those bets were companies that were going to last, because I saw a lot of 2021 companies that just fizzled out and died Right.

Oriana Papin-Zoghbi: 22:55

So for me, 2023 is like you know, when you're a Girl Scout and you collect like badges of things you've accomplished, like that's my badge, like I survived 23 and I raised money and kept my business alive Right, because, also, not everybody knows this but in the startup world in 2023, silicon Valley Bank collapsed. And all my money that I had raised out of YC was tied up in there.

Marcus Arredondo: 23:20

Oh man.

Oriana Papin-Zoghbi: 23:21

Weekend of my life. I thought this was the end, this was the absolute end of AOA and it was so beyond my control and there was nothing that I could do. And this is like in my head I kept replaying. This is not how my story ends. This is not how AOA ends. Midway through that weekend, we had negotiated with some of our investors if this happens at Silicon Valley Bank, like, will you support us to stay alive? And thankfully they would have.

Oriana Papin-Zoghbi: 23:46

But coming out of that to then still go on and close a round of financing which but coming out of that to then still go on and close a round of financing which was an up round as well, which means that our valuation grew, was the hardest thing I think we ever did until 2024. I'll tell you about that later. It was every conversation we'd had in 21 and 22 about what milestones would be sufficient to raise the next round were no longer relevant because the bar had just gone up. Like, if you thought you needed preclinical data, uh-uh, now you need clinical data to get the same thing. If you think you needed to have done this with \$5 million, joke's on you. You should have done something that \$10 million would have cost, but you should have found a way to do it with \$5 million. So it was the bar was so high. Vc behavior

was so vulture-y, really trying to take advantage of companies, really trying to take advantage of getting good deals. It was. You were seeing terms that were being put on the table that were so egregious, that were disadvantaging founders, disadvantaging the company, and so it was just a really really hard time, and what kept us going is we're so fundamentally bought into our mission. There is such a huge unmet need for what we are solving. Women are dying because there's a lack of a test to diagnose ovarian cancer early right, and the people on our team were also so, so bought in.

Oriana Papin-Zoghbi: 25:18

And the investors that we had raised money from those that had given us those early 5 million were so supportive of us and I did an exceptional job at making sure that they were updated. I stayed in touch with them. I provided them updates. I made sure that they knew what our roadblocks are. So I was constantly commended on you are one of the best communicating portfolio companies that we have. We're going to continue supporting you because we know what's going on.

Oriana Papin-Zoghbi: 25:42

You're not kind of building in a black box, and so we operated with transparency, we operated with mission and we went and we had term sheets that would have funded the company but that were not aligned with who we were as a company that we had to walk away from until eventually we ended up meeting our lead, good Growth Capital, and thank goodness. Thank goodness that we did, because from the day we had our first conversation we were treated with mutual respect. There was a true understanding of the meaning partnership. We were treated with mutual respect. There was a true understanding of the meaning partnership. The value in them working with us went beyond just the capital right To this day. I'm raising a new round of financing now and you know they've been value add along the way.

Oriana Papin-Zoghbi: 26:22

We ended up building a really strong syndicate with strategic investors as well, and so we persevered and fundamentally, I think the core Anna Alex and I felt was like don't take money from the first person that comes in if it's not the right thing. We again to meticulous planning. We planned for the fundraiser to take time so we weren't shoved into a corner and be like we're going to be out of money next month. We have to take this. We never let ourselves be in that situation because we started way in advance. But yeah, it was, 2023 was one of the hardest years. You say that and then the next year is harder but also better.

Marcus Arredondo: 27:02

Well, you have more resources, you have more experience and you're probably a little bit more grizzled from prior circumstances, so you can approach it differently.

Oriana Papin-Zoghbi: 27:11

Yes, but the problems are new. At that point we were up until three years. We were six people. We were getting everything done ourselves. We were working until three years. We were six people. We were getting everything done ourselves. We were working with collaborations. All of a sudden now we'd raised close to \$20 million and we need to scale rapidly.

Oriana Papin-Zoghbi: 27:23

And scaling a company is just, it's a beast of its own. Everything broke, Marcus. Everything the way we communicated broke, the tools, the tech stack we used broke. Like how we were setting our milestones broke.

Oriana Papin-Zoghbi: 27:36

We had to hire and we didn't always do the best job at hiring the right people. Like I learned that along the way. Everybody tells you hiring is the most important thing, but until you're hiring 15 people in six months, you don't. You conceptually know that, but then you're living it. So end of 23, early 24 was just as hard as raising the money. We really hit our groove like second half of 24 when all of a sudden we had the money in the bank. We had our lab up and running. We signed our lease. Also, I mean we want to sign a lease. Nobody can sign a lease until you close the money. We had our lease up and running, we had our instruments in the lab, we had hired the team, we'd reshuffled a few things because we had made the right hires. And then the last half of 2024, we're like we've hit the ground running.

Oriana Papin-Zoghbi: 28:21

We're hitting milestones, we're getting data readouts. Only for 2025 to roll up and me to be like great, got to go raise money again.

Marcus Arredondo: 28:29

Yeah, you know, it was an earlier podcast with Marty Wiener, who was the founding engineer at Pinterest and CTO of Reddit for a period of time, talked about he grew his teams from. I think it was five to 800 people and he said there was a series, it was learning how to fix the breaks, because every system you built got broke at certain thresholds, whether it was 40 people or 60 people, whatever it was. But at each layer there was sort of a regeneration of how to build, sort of those sequences to minimize, I guess, operational slack for lack of a regeneration of how to build sort of those sequences to minimize, I guess, operational slack, for lack of a better term. But that's a very common thing. But before we get away, because I want to talk more about this, tell us a little bit more about AOA, because you mentioned it and I came across a stat that I wanted to share because I think it's meaningful to sort of conceptualize this.

Marcus Arredondo: 29:17

But ovarian cancer ranks fifth in cancer deaths among women and, due to lack of early stage testing, it's often not identified until stage four, dropping the five-year survival rate to under 20%. That is a staggering, staggering statistic. The current standard of care for ovarian diagnosis is CA-125, which came to market in 1987 with no improvements over 35 years. That is something that really struck a chord reading, just given the gravity and also you know also, I think, generally speaking, the lack of attention to female healthcare from, you know, the broader community. So I wanted to sort of lay that groundwork for the audience. But I want you to give us a little bit of feedback on the company itself, how you got involved and sort of where it's going.

Oriana Papin-Zoghbi: 30:07

Yeah, so everything you described is correct. There hasn't been any innovation in the space of ovarian cancer detection for over 30 years. The standard of care is a proxy standard of care because CA-125 isn't even approved by the FDA to diagnose ovarian cancer. But for life.

Oriana Papin-Zoghbi: 30:23

it's a better alternative. It's what clinicians best use. Ca-125 only catches about 50% of early stage cases, and so 80% of women are diagnosed when it's already stage three and four. This is cancer that has metastasized, it has spread in the body. The five-year survival rate is abysmal. So, to summarize, most women are diagnosed too late and most go on to die, and that is not something that the healthcare community accepts with comfort, but it's become the reality. Everybody will tell you this is terrible and we wish we could do something about it, but clinicians, researchers, are having a really hard time solving for that problem.

Oriana Papin-Zoghbi: 31:03

We came about starting AOA on this principle that you know, diagnostics are this often overlooked value in the healthcare system, even in the world. Honestly, diagnostics became more popular with the spread of COVID and people realized how important it was to get tested for something, and that created like a micro bubble of why important, why diagnostics are important. But there's so much more work to be done. We can do a whole podcast on just how broken diagnostics are, but in ovarian cancer specifically, this is your perfect example of not diagnosing the disease early enough means that treatment doesn't work at that stage. Right, let's contract that that are diagnosed stage one and two. Their five year survival is 90%. So we have appropriate treatment for women if they're diagnosed early enough. We're just not diagnosing them early enough because there has been no innovation in this space that has been able to move the needle. We met with a professor in 2019, Francis Aragobi, who was looking at a new class of biomarkers, a new molecule that's circulating in the blood. That showed some early potential. We got some non-dilutive funding and we kind of explored that potential and then you know, we got the money and that's when we did like a really small study when we were in YC and we've been able to continuously prove this out.

Oriana Papin-Zoghbi: 32:19

So basically, what we're building is a blood test to help clinicians diagnose ovarian cancer when they go to the doctor complaining of these vague abdominal symptoms. So over 90% of women with ovarian cancer have vague abdominal symptoms. Bloating, changes in bowel movements, early satiety happens more than 10 times in a given month. They go to the doctor. They say something's wrong. The doctor says let's do a CA 125. Let's do an ultrasound. We're not sure what it is. Come back again in three months. Let's do another CA 125. Let's do another ultrasound. We think you're getting worse. Let's refer you to surgery so we can do a biopsy. Do we think it's cancer? Let's refer you to an oncologist for the surgery. Don't think it's cancer? Let's refer you to a gynecologist for that surgery. Oh shoot, by the time you have that surgery on average it takes nine months in the US it's too late. So it's just this poor, poor pattern. What we're developing is a really, really accurate blood test so that when that woman is showing up right at that first appointment, right, she's getting a blood test that can help guide her care to the right physician, to the right specialist, to the right surgery much, much faster and help really increase that time to survival.

Oriana Papin-Zoghbi: 33:24

So, because our mission is so, it's so impactful, right, and there are many companies with incredibly impactful missions, but we live and breathe this every day. Alex is my co-founder's mom is battling ovarian cancer. Today we have met with survivors. We work with advocacy groups. Like we hear these

stories all the time that when we go through the things like Silicon Valley bank or the 2023 market crash or everything breaking when you're scaling, it's like it's that light, it's that we're doing this because it's that purpose.

Oriana Papin-Zoghbi: 33:56

That that's like people sometimes ask me, like how you know what drives resilience and I think some of it is it's nature versus nurture some of it. I think there's certain character, right traits, but I think the other part is like what are you fighting for? What are you? What are you trying to build? And if, at the end of the day of the founder, you're trying to build because you believe that there's going to be a lucrative exit that's going to make you billions of dollars, trust me, I don't know about you, but that's not enough for me to keep going. There's something so much bigger at stake here that I think drives us to put up with all the hardship that kind of comes into this journey.

Marcus Arredondo: 34:32

So, obviously, fundraising, building a team and a company is one challenge. What's it like trying to work through government hurdles to get this approval process, to get it through some certification? And then, on that note, what's your opinion working with grants? I know that you've gotten some non-dilutive funding in that capacity. What's your opinion on that? What's that process been like?

Oriana Papin-Zoghbi: 34:59

opinion on that. What's that process been like? So the most challenging thing about sort of moving a diagnostic through the process is that you depend on certain things outside of your control the FDA, cms, reimbursement right, all these different government agencies. The biggest challenge that exists in the world this is not just the U S, this is everywhere is that there is no clear cut playbook. What's a little bit more heightened in the US is every time an administration changes, the playbook changes again and so there's really a lack of consistency around what the rules and the operating procedures are, which makes it hardest on small companies to continually adapt to that. It makes it easier for small companies and for large, large companies right, even though they have the bureaucratic power, we still have the ability to like, pivot and adjust and if a new guidance come out and a new rule comes out, et cetera. In my world, specifically as an oncology diagnostic and in the division that we're in with the FDA, we have a good understanding of our path moving forward. And we have that understanding because we've taken the approach to partner with the agency from the inception of FDA, of AOA. We have met with the agency, we have gotten to know our review team. We've met with them multiple times now and really tried to build a collaborative approach of. This is the problem that we're trying to solve. And so I think as a small company and with the mindset that we have, particularly again, we can kind of adapt to the river bends in a certain direction when certain things happen in public policy, and we can adapt with it.

Oriana Papin-Zoghbi: 36:29

From a grants perspective, I'll tell you my experience. We were really successful in getting non dilutive funding in the earliest days of AOA, were really successful in getting non-dilutive funding in the earliest days of AOA when we hadn't raised venture capital. After we raised venture capital, it hasn't been all that easy for us to continue to raise. I think a lot of it happened because we ended up moving out of academia, where a lot of the non-dilutive funding ends up going, and now we are much more in a corporate setting. We generate our own IP. We're not tied to an academic academic institution as much.

Oriana Papin-Zoghbi: 36:59

That's my theory on why maybe we've been less successful on the non-dilutive front. There's a trend that I've seen generally is like is that um companies either raise much more non-dilutive funding and less vc funding, or they raise more vc funding and less non-dilutive funding. I haven't seen many, many companies raise both extremely well. There are obviously exceptions, but yeah, our experience has been sort of when we ended up moving towards more of the VC track. We ended up getting more capital there than on the non-diluted side.

Marcus Arredondo: 37:28

Okay, that's good. That's super interesting. I've had several conversations with different people about grants and there's differing opinions on it just based on the circumstance.

Oriana Papin-Zoghbi: 37:38

I think there's a time and place, right. I think it's like everything. Like there's a time and place for angels investors. There's also a time and place for private equity, right. It's like where are you in the journey and how can they best serve you in that path?

Marcus Arredondo: 37:52

So tell us a little bit about so you're of a different size. How many people do you have now? 25. At the company 25. At the company 25. And you've got a board. Can you talk a little bit about how you are conducting those, how you got the board assembled, how you've managed that board and then sort of what your process has been in terms of hiring from the lens of what advice you would give to maybe yourself five years ago?

Oriana Papin-Zoghbi: 38:19

from the lens of what advice you would give to maybe yourself. Five years ago, so from a board perspective, before I started Y Combinator, I had been introduced or I had been told that I should reach out to Surabhi Sarna. She was working at YC at the time but she had built this device company in ovarian cancer that had exited very successfully and I had been told by multiple people you should talk to her, and I was a first time founder at the time and nobody was willing to give me an introduction. So I ended up cold outreaching to her and she accepted and we got to know each other through Y Combinator and amongst many things. And I remember saying to her multiple times in my journey one day you'll join my board and she's like I cannot, not with the commitments that I have, not with X, y and Z. And I said one day it'll happen. About a year later of courting her, she joined as our independent board member and that sort of that was a relationship that I grew over a long period of time of her getting to know us and of us getting to know her, because we were both so mission aligned and because Sorby had immense expertise, um, and also because I think serbi appreciated the way we worked and, um, how transparent and kind of direct and no bullshit we were as a team.

Oriana Papin-Zoghbi: 39:24

Well, we went on at that point really, when we were a baby company before we'd raised the round of funding in 2023 um, the board was my co-founders and I and serbi, and we had one of our early stage investors as an observer and it was Serby really educated me on board dynamic and really creating a

board structure, even before we had a formal board as a practice to eventually having a formal board. So, by the time we raised the 2023 round and you're more traditional it's like you have your lead observer that takes a seat, then you have, you know, one of the founders or management team that takes a seat, then you have one of the founders or management team that takes a seat and then you have an independent. By the time 2023 came around and we had a formalized board structure, I had been coached and I had had practice on quarterly board meetings, on presentation updates, on communicating with the board, and then, after the 2023 round of financing as well, I also brought on an executive coach that has a lot of experience around sort of board management and investor management, and so I've worked really hard on how do I communicate. How do I communicate in the boardroom? But, more importantly, which is what most people don't think about, how do you communicate outside of the boardroom with your board members and your key stakeholders? How do you cultivate those relationships? How do you handle challenges? How do you handle emergencies? How do you share good news? So all of those are skills that I had to learn, both on the job and through practice, but also by my peers and by having an executive coach.

Oriana Papin-Zoghbi: 40:52

I think, if you ask my board members today, they are very appreciative of my transparent and direct style of communication. We really focus on cultivating human relationships with each other. Like these are my board members, who I know about their families. Like one of my board members' wife passed away of ovarian cancer. I know the anniversary of her death and I will send him flowers every year on the anniversary because this is so important and special to him and it is so meaningful to me that he's chosen to spend his time almost in retirement to work with us.

Oriana Papin-Zoghbi: 41:25

Right, and so, at the end of the day, managing a board, like managing investors is, there are humans at the end. And again, I come from the sales background. People don't buy products, people buy from people, and the same happens in fundraising and startup. People bet on people. Your idea can change a million times along the way, but are you the right people that's going to kind of carry the fiduciary responsibility of that capital?

Oriana Papin-Zoghbi: 41:49

On hiring, everybody told me this, so I'm going to give the same advice and I'm going to tell you you won't believe it until it happens to you Hire slow, fire fast. Everybody says that. I mean, I can tell you why it's so hard to follow that piece of advice. You've just raised money. You have 18 months at most to hit your milestone, and the sheer thought of hiring slowly and not having those people around to hit your milestones faster is daunting.

Oriana Papin-Zoghbi: 42:17

And then on the flip side, you have somebody who's either not the right fit or not the right fit, either culturally or technically, and you're like but I can't let this head go because I have to hit my milestone. I have lived that, I know that I acted in that way. And if I could go back and give myself the advice every single time now hire slow and fire fast, because whatever time you think you are gaining and making those decisions, you will lose in the inefficiency of having a poor person on your team, like whether they are what I believe is the worst of all a poor cultural fit or a toxic employee who is a high performer that is like the worst thing you can have on your team, or the hard thing you can have on your team, which is a

really wonderful human that everybody loves working with, but a poor performer. Both scenarios they will hurt you so much more in the long run than having an empty seat that you fill with the right person. So I learned that the hard way.

Marcus Arredondo: 43:15

That's great advice. I know that we're going to come up on time here, so I would be remiss if I didn't explore this one topic that I keep finding myself thinking about, which is that you have a multicultural background. You've lived in a variety of places. You went to school abroad, to boarding school. You mentioned several of your female family members. I'm sure there were others that came in when your daughter was born. I'm curious if you can sort of just talk about what influenced that background, because you're a bit of a polymath, right. You sort of know a lot about a lot of different things, and you've had to do that and you've acquired the skill set. But that requires not only adaptability but a high level of curiosity, a certain degree of intelligence and intellectual acumen to actually acquire it, to digest it and to utilize it. Where do you think that comes from? What influence does that background have on you?

Oriana Papin-Zoghbi: 44:08

I think there are a couple of things. I think I didn't grow up in the US For all intents and purposes. I came to America for the American dream, right, for all intents and purposes. I came to America for the American dream, right, and, um, I had something to prove. Um and like failure was not an option, because for me, failure was going back Not that there's anything wrong with where I grew up, um, but I knew that I wouldn't have the same levels of opportunities, right. So I think that's one part of it is, I feel I I came to the U? S for college and stayed here and I was the first, you know, or one of the first in my family, who grew up abroad and ended up coming here. That's early in life, and I felt like I had something to prove, like I could make it and, right, and I think it's that chip on your shoulder, um, that often comes with kind of being an immigrant into a country that kind of perseveres a little bit, yeah, um. Another part of it is I have a very let's call it entrepreneurial, hard-working family, right? So my mom is a doctor and, uh, she studied in venezuela, she did her medical school in venezuela by the time she met my dad, my dad was already working in saudi arabia. So she was a female physician who had to move to saudi arabia, who didn't speak a lick of arabic, uh, even though she has middle eastern background, middle eastern descent, her family is also lebanese of origin but never been in the Middle East, and she kind of had to prove her way. She ended up being one of the most successful plastic surgeons in Saudi Arabia and starting her own medical distribution business. So I grew up kind of seeing her leave everything that she knew in Venezuela to come to Saudi Arabia to build something for herself.

Oriana Papin-Zoghbi: 45:55

Right, my dad was in Lebanon. He grew up in Lebanon. He grew up in a home of farmers, of olive tree farmers. He was the first to get an upper education. Then for him he had to go to the Gulf to become a civil engineer and eventually ended up in Saudi Arabia. And so this concept of like I have to.

Oriana Papin-Zoghbi: 46:15

If what I want for myself doesn't exist where I am, then at the age of 18, I have to. If what I want for myself doesn't exist where I am, then at the age of 18, I have to be willing to be incredibly uncomfortable. Actually, in my case, I was 15 when I left home to go to boarding school because the education system in Saudi Arabia was just. It was no longer at the standard that I wanted for myself back at the time.

Oriana Papin-Zoghbi: 46:33

So much has changed in Saudi since then, but I had seen from my parents that if the cap of what you can reach here whether it was Venezuela or whether it was Lebanon is not enough, and you're and you can go somewhere else to achieve that. I saw that as an example, right. So then I was like, okay, I want to. I think I want to do.

Oriana Papin-Zoghbi: 46:53

Actually, when I came to the US, I thought I wanted to be a doctor, so I knew that I wanted to work in the life sciences. Okay, I want to do this, right, and I want to go to America, because in America, that's where all the dreams come true and if you work incredibly hard, that's what can happen. And so, yeah, my path worked. A lot changed along the way, but my mindset of like I'm going to leave everything that's familiar to me, I'm going to give up being close to my family it has to be worth it in the end, and worth it is subjective, but it's like I have to feel proud of my accomplishment and I think that's what kind of drives some of that resilience and some of that obsession. Is that like I would give nothing more than to be near my mom right now or my dad and just like raise my family there and it's like if I'm over here it's it's to make it. Does that make sense?

Marcus Arredondo: 47:38

Absolutely. I think that's a great place to land. Thank you so much for being on. We'll include in the show notes more about AOA. Do you have any closing thoughts or anything that you think I might've missed?

Oriana Papin-Zoghbi: 47:48

No, I love this conversation. Thank you for digging it in so many different directions.

Marcus Arredondo: 47:58

Me too. I appreciate it and keep up the work because I think it's, as they say, you know, doing the Lord's work here, so good luck, thank you again. Thanks for listening. For a detailed list of episodes and show notes, visit [scales of success podcast.com](https://scalesofsuccesspodcast.com). If you found this conversation engaging, consider signing up for our newsletter, where we go even deeper on a weekly basis, sharing exclusive insights and actionable strategies that can help you in your own journey. We'd also appreciate if you subscribed, rated or shared today's episode. It helps us to attract more illuminating guests, adding to the list of enlightening conversations we've had with New York Times bestsellers, producers, founders, ceos, congressmen and other independent thinkers who are challenging the status quo. You can also follow us for updates, extra content and more insights from our guests. We hope to have you back again next week for another episode of Scales of Success. Scales of Success is an Edge West Capital production.