



Stanford eCorner

Empathizing and Confronting Failure

Sean George, *Invitae*

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Sean George, president and chief operating officer of Invitae, describes how he helped start the genetic-testing company because of the empathy he felt for parents of children with inherited disorders. He also talks about how the experience of confronting imminent failure prepares one to be a leader.



Transcript

Seeing these parents with these kids that were not developing, that were not growing, that were having serious, serious problems really put it in perspective for me, these people had problems. I will never have problems, most likely, that these people have and I think as I kind of went through that experience that's what then stuck in my head as this is ridiculous, this is ridiculous that given them where the technology is today, these people wait so long for the testing, they can't even get access to testing, the clinicians don't even tell them about the testing because it costs \$20,000 to get it and very likely won't give them an answer anyway. That's when it kind of all started coming together. So I kind of at that point put it together, I knew where the next generation sequencing technology was going, effectively the cost per base of the human genome was dropping off faster than Moore's law, which I think we all know what Moore's law did for computing, networking and everything that has followed. And it was pretty clear about five years ago, this is what's going to happen in medicine, this is what's going to happen in genetics and I am going to go - we're going to go figure out how to make this work. So we decided it was myself, a couple of other people that were working with me at the time, we kind of popped out, decided to go start a company and the idea was, hey, let's build a company that will consolidate the 3,000 to 4,000 some odd genetic disorders, the test for these 3,000 - 4,000 genetic tests, consolidate it into one highly-efficient, industrialized, platform production line to consolidate the entire genetic testing industry, drive the price to the floor and make it available to everybody, and that's what we started with and while there was no way at that time I could really know exactly where it was going, I certainly couldn't know that I would be standing here today telling you about it. That's essentially what we are doing, so Invitae now we are basically hell bent for leather on bringing genetic testing into mainstream medical care for literally billions of people on the planet. Anybody in a developed healthcare system can benefit from this. I mentioned the 3,000 to 4,000 genetic disorders that I kind of became familiar with many years ago. In fact it affects possibly up to 10% of any given population, up to 10% of the population has an inherited genetic disorder, it's just that they are so fragmented, 3,000 to 4,000 of them are spread that any one of them seems small enough, the biggest one, the biggest market - consolidated market by far is the breast cancer testing, Myriad does it, but there is a long tail of these genetic disorders and so that's what we set out to do and indeed, thankfully that's what we are still doing.

We went out to raise money, this was end of 2009, not the best year to go out and raise venture capital and in fact it turns out - we pitched to more than 110 places, firms, funds, what have you, it turns out half of them didn't have any money, you know knowing - seeing where those firms went now, half of them just didn't have any money, the crash that happened, things were rearranging, capital was getting reallocated, so it was a long haul, we pitched to more than 110, really for about a year, it was a fairly tough time actually that was the first six maybe six to nine months into it, was a first time I really faced the potential for fairly like squarely in the face. The team that we were working with, there were four of us, we were kind of self-funding it, we had some space, we got going, we actually started originally in the Tres Agaves tequila tasting room up there in San Francisco, were there for about a month and a half, one of the co-founders knew the owner, so we holed up there. Then we moved to the QB3 space over in Mission Bay, so we had some space, we got some of the equipment up and running, we were getting going,

confident that we were going to raise money but then after six to nine months of just no, after no, after no, after no, part of the team started shaking loose a little bit, they needed to go get a job, their spouses were like, hey, how long are you going to pursue this crazy dream, that summer right before we got a couple of these firms interested was definitely the first time, certainly in my career ever that I really stared failure in the face. I am a fairly confident individual, no one has ever accused me of a lack thereof. But boy, that experience there, that was trying and that's by the way, that's why I think you should do it, I think you should do it just for that experience, it's been invaluable to me, just facing that failure in the face, pulling these three people along, invaluable, invaluable and really actually frankly prepares you for the next phases of company formation.