

Meet Sano Genetics, the healthtech startup transforming personalised medicine research

As part of our quick fire questions series – or QFQs – we spoke to Patrick Short, CEO & Charlotte Guzzo COO at Sano Genetics about the potential of precision medicine, at-home DNA testing and making remote work culture work for everyone.

What was the catalyst for launching Sano Genetics?

[Patrick] I met Charlotte and our fellow co-founder Will (Jones) when we were postgraduates at Cambridge. All three of us were studying genomics from very different angles but we shared the same excitement about the potential of precision medicine.

Today, there are still around 6,000 diseases with no treatments. As for the diseases for which there are treatments, they tend to be ‘one size fits all’ – meaning they don’t work for everyone. Currently, it takes 10 to 15 years and more than \$1B to develop new treatments. It’s too long and too expensive.

[Charlotte] We know that precision medicine is more effective – medicines that

use genetic biomarkers are two to three times more likely to succeed. But there are major barriers to overcome. The biggest challenge is finding participants for research. Around half of clinical trials are delayed, and 85% fail because they can't retain enough participants. And that's where the idea for *Sano Genetics* began. We decided to apply technology and at-home DNA testing to the field of precision medicine.

Tell me about the business – what it is, what it aims to achieve, who you work with, how you reach customers and so on?

[Patrick] We're transforming the way people participate in precision medicine research. In the past, the process for patients has been time-consuming, potentially involving travel and time out of work. There's no feedback afterwards and, aside from pure altruism, there is very little incentive to take part.

Our study participants take part from home. They receive a free DNA saliva swab – the whole process takes no longer than 10 minutes – and they post it to our lab. Later, they'll receive updates on the contribution their data is having, and they'll be alerted to other trials they might like to be part of (but they only need to provide a sample once).

Data privacy is often a big concern for participants so this was a key consideration for us. Our users keep full control over how and when their data is used and can delete it at any time. Participants are also offered personalised genetic reports as an incentive to get involved, helping them better understand their body, their health, and their needs. For the pharma, biobank and biotech companies who are our customers, using Sano allows them to carry out studies 10 times faster and at a fifth of the cost, by making it easier to recruit and retain participants. We're currently supporting studies into conditions including Long Covid, MS, ulcerative colitis and Parkinson's, among others.

How has the business evolved since its launch? When was this?

[Charlotte] We launched in 2018 after coming up with the idea the previous year. Since then, our business has evolved into something quite different, as a result of us taking onboard learnings and being responsive to feedback.

A winning idea is only ever the starting point – what follows is a long process of constantly refining your idea, gaining a deeper understanding of the market and being alert to opportunities.

Over the past six years, we've seen huge growth: we now operate internationally and have grown our team to 50. We've also built a strong network of partners, including top biobanks in the UK and Australia, and patient groups like Fatty Liver Foundation in the US.

Tell us about the working culture at Sano Genetics

[Charlotte] It's based on transparency, impact, accountability and curiosity. We all work remotely, and while that helps us recruit talented and passionate staff from all over the world, we know it can have its drawbacks too, so we've put a lot of effort into refining our remote work culture so it works for everyone. We have regular in-person socials and meet ups.

How are you funded?

[Patrick] Venture capital funding totalling \$14.9M to date. That includes an \$11M series A round in 2022. We've also received a number of non-dilutive innovation grants, including £480K from Innovate UK.

What has been your biggest challenge so far and how have you overcome this?

[Charlotte] Striking the right balance between scaling fast and consolidating our processes and resources as we grow. It needs strategic thinking mostly, but it's a bit of trial and error too. Mostly, we are laser focused on our yearly goals and we continually check in to ask ourselves what will get us there. We also do a lot of risk assessments or 'pre-mortems' – reflecting on costs vs benefits.

How does Sano Genetics answer an unmet need?

[Patrick] The infrastructure to match patients and researchers working on studies, and keep them engaged, just wasn't there before we arrived on the scene. Our research shows that while 80% of patients want to get involved in

studies, only 20% have ever been alerted to relevant opportunities. Doctors and consultants, for example, don't always have the time to signpost people to studies that are relevant to them.

Since we launched, thousands of people have been able to take part in research from the comfort of their own homes, at no cost to them. And, provided our users allow it, their genetic data can be used in future and follow-up studies, something which had hugely hampered research in the past.

What's in store for the future?

[Patrick] Our vision is for a world where diseases can be predicted and, through the use of genomics and other data, prevented, treated or cured using a personalised approach.

In the near future, we hope to become the leader in patient recruitment for precision medicine trials, impacting the lives of millions of people living with rare and chronic diseases.

There's huge potential in the precision medicine market, which was valued at USD \$52.4B in 2020 and is expected to grow to \$112.8B by 2027.

But there are big challenges ahead. A lack of diversity in research is another major concern, which is why we're working hard to reach underrepresented groups and make sure datasets are fully representative of populations.

What one piece of advice would you give other founders or future founders?

[Charlotte] If cash flow allows, don't be afraid to hire experienced people. In the early days, we shied away from paying out big salaries to top talent. While our bright junior hires and interns were helpful to a point, it was when we took the plunge and hired people with years of experience and plenty of contacts that we started to sign major contracts.

And finally, a more personal question! What's your daily routine and the rules you're living by at the moment?

[Charlotte] It is really important to me to block focused time in my calendar. The number of meetings, Slack messages and emails can quickly take up all

the space, so you have to build in some dedicated time to think strategically and get things done. As a mother of two young children, I also need to be strict with myself about being fully in the moment during the time I spend with them. I am more productive at work if I don't feel like my family life is being neglected. It's a juggling act but you quickly learn that the world keeps spinning even if you don't do it all and even if you don't do it straight away.

Patrick Short is CEO & Charlotte Guzzo is COO of *Sano Genetics*.

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