

[MUSIC PLAYING]

Hi. I'm Sharon Glaysher. I'm the Research Laboratory Manager at Portsmouth Hospital in NHS Trust.

I'm Angie Beckett, and I'm a Specialist Research Technician at the University of Portsmouth.

And I'm Sam Robson, and I'm a Reader in Genomics and Bioinformatics at the University of Portsmouth. And today, we're going to be chatting together about the work that we've been doing for the past two years with the COG-UK consortium working over the COVID-19 pandemic. Sharon, what can you remember about how we started working on this project?

I remember your Friday afternoon frantic phone call telling me the University was going to close, and could we do something about this virus, and do some research. And can I bring my stuff to your lab please before they lock you.

I was on holiday. And I was out with my daughter. And I don't know why I checked my emails, but I did to find out that lockdown was coming, and the labs were going to be shut down. And I panicked a lot.

And I think just that morning, I think, I had sent you an email about the idea, and the fact that I'd read the ARTIC protocol, which showed how we could use our nanopore sequencer to help with the COVID-19 sequencing. And I had suggested it to you. I'd also emailed the dean of our faculty that same day.

And for some, reason checked my emails, probably to see if anybody responded to find out that, yep, the labs are going to be shut down. I think I unceremoniously dumped my child with a childminder, or with her grandma, I think, rushed over to the University, running around with a couple of my colleagues, including Dr. Gary Scarlett. We ran around grabbing what we could out of labs, out of freezers.

They were literally locking the doors behind me. And we couldn't get into one of the labs, which is where most of the stuff was. And we couldn't track down a person who had a code to get in. So that was again, very frantic. But we were able to grab everything, throw it in the car, drive it down to you, pouring down with rain, I think if I remember.

Everything was dark. It was a horrible sort of evening. I think we got some funny looks from the rest of pathology as we were carrying random boxes of lab equipment through the back doors of the hospital up to the lab. There were everyone wondering what we were doing.

And it was very much a-- yeah, we'll figure this out. Because this was a Friday. This is Friday evening.

Yeah.

Probably about 6 o'clock in the evening by this point. And I think we just said, yeah, we'll sort this out with everybody later next week. And that's pretty much what we did. I think the following week we chased everybody up and said, so I guess we're doing this. I spoke to the Dean of the University. She gave us a bit of money.

The University were able to provide some seedcorn funding to get us going. And actually, that was the same day-- the Monday following was the same day Angie joined us.

Yeah, my first day of the job was the first day of lockdown. And so this plastics project that I've been hired to do was like not in existence. Everything, the universities were shut. And I was thinking, what am I going to do now?

But luckily, you messaged me and said, maybe I could get involved with the COVID work at the hospital. And initially, Sam sort of said, oh, how do you feel about maybe spending a couple of months at the hospital? Maybe we'll sequence like 400 samples, and then almost 20,000 samples, and a year and a half later, we were still there.

I guess with that, we were thinking of doing about 400 samples. Can you remember what the idea was behind it, why we were thinking that this would be really useful for the hospital?

I think originally, we were kind of thinking that we didn't know why it was spreading, how it was spreading, how we could limit that in the hospital with infection prevention. Obviously, we knew that it was a respiratory virus. But again, we were trying to sort of limit that spread, and making sure that we were keeping our patients safe.

And obviously, that putting those restrictions on patients at the beginning obviously was very, very hard. And so finding out anything that could help obviously drive those changes in the hospital, putting those sort of cleaning regimes, and stuff in place to make sure that we were keeping our staff and our patients safe was a big sort of plus point I think that really solved the project idea to our director of research and the exec board.

There was such little information about COVID at the time, wasn't there? And so it's quite daunting actually not knowing what to expect, and what's going to happen, and how we could control it.

Yeah.

My wife is a senior respiratory physiotherapist at the hospital, and was obviously quite heavily involved in looking after patients. So I was getting it from multiple directions. I was seeing it from the research side working with Sharon, but also from the patient side, and seeing the fact that really, we really didn't know what this was, or how to help people that were really suffering with it.

So from my point of view, anything that I could do, I really felt that we've got the technology that can help with this. We really should. So when we started off, it literally was the three of us working with a MinION.