

[MUSIC PLAYING]

Here, in our lab, we have in total 52 people work through different fields inside our lab. We have the Chief of the Laboratory, that is Dr. Marilda Siqueira. So she coordinate all these teams. And we have different teams working separately.

We have the first one that I'd like to mention, is the Sample Process Extraction and Detection by real time PCR. So this team receive the samples and give the detection of SARS-CoV-22, Influenza, and the other respiratory virus, for example. And we have 12 people working on this.

The other team is the Sequencing Team and Bioinformatics Team, that I'm leading them. And we have 14 people working with the research working together. And we have a part of Administrative and Database with five people. We have also Cell Culture, Neutralisation, and Phenotypical Assays. We have nine people in this team that is working with these phenotypically, serological assays.

And we have also another different lines of research here in the lab, like Environmental and Animal Research. And we have four people working on this. And as we have also, we are a Reference lab for measles, too, we have a separate team working with measles, so we have seven people on this team.

We have also students, but they are not in this count, but we have, in total, nine students in this moment, PhD students, Masters students, working helping us also in some activities in the lab.

Everybody involved in the lab work was working in lab and working the centre, we got over 50 people involved in the lab work throughout the year. Yeah, people involved in testing and sequencing my lab, I look at that across the country.

So we got samples from the Southeast, from the South side, from the southwestern part of Nigeria. And also those are from my team. But then those involved in the lab, were involved in the sequencing, we have a team of over 30 people. So overall, we got over about, I would say about 100 people involved in the whole process as part of my team. And those are the people that were responsible for generating the thousands of sequences that we have done so far.

The number of team members and the team members themselves have really evolved throughout the pandemic. When we first started sequencing, there were only four members who are really involved in the core genomics team, laboratory scientists and bioinformaticians. And all of them were based in Dhaka Bangladesh.

We did receive support from one of our adjunct scientists, who is actually based in Cambridge, but works with the Child Health Research Foundation. With time, our genomics team has grown. And now in the core team, we have 12 members, at least, and includes bioinformaticians, laboratory scientists, and biostatisticians.

But again, this entire team is supported by the entire organisation, the multidisciplinary organisation of about 300 people. And we are primarily located in Dhaka, Bangladesh.

I would like to break this question into two parts. The first part is regarding artificial based detection of positive samples. We set up the detection pipeline in April 2020, initially using CDFD's or my institute's, own student and staff volunteers, performing for three to four shifts per day, essentially working 24/7 hours, each shift running for about three to four hours, handling hundreds of samples.

So this began last year in around April. And then later, we were able to hire technicians exclusively for RT-PCR-based diagnostics. And of course, our staff and students remained on call. And they remain on call even now. The second part, which will address your question directly, is the sequencing part.

So we began sequencing in last year July 2020. And the sequencing was mainly handled by the National Genomics Code Facility, which is also established by the Department of Biotechnology at my institution. And around three to four technicians were involved in the sequencing part.

However, since the samples were mostly received from outside CDFD, we continue to use the RT-PCR staff to receive code and distribute the samples to the sequencing team. So basically, it was a kind of a tie up between these two sections, both situated within our institution.

The sequencing data analysis were performed by a separate team, which were directly reporting to me. They were part of my lab. All of this is located within my institution, so CDFD in Hyderabad.