[MUSIC PLAYING]

Fortunately, we did not need to worry too much about sample storage because most of our samples were sourced from state public health centres, who were already storing the samples. We were just getting part of those samples for sequencing. We are definitely storing both viral RNA samples within CDB also. And we do inform the original public health centres in case we are going to discard samples and make sure they have the original stocks with them. For us, the more important emphasis was to ensure proper storage of raw and processed sequence data although we were uploading into national portals as well as GISAID. But this was a more important challenge for us than storing the samples actually.

As a reference laboratory, we are trying to keep our samples as long as we can. So for example, we have samples from the previous pandemic that we had, the H1N1 pandemic in 2009. So it's important to save these samples that we have because we can investigate all the viruses in the future and other things. And we can do other strategies, other assays in these samples that we are saving.

And another thing that we are trying to do is to keeping like a biobank or biorepository where we isolate the virus. We are trying to isolate some important lineages that circulate specifically here in Brazil or some variant of concern, variant of interest. And these lineages, after isolate, we sequence these genomes and characterise well these isolates and keep it safe because we can share with other groups, other students, or other initiatives that want to use this specific virus for the vaccine production or of diagnostic tests or other disease.

What happens to samples after we are done sequencing? Well, I'm a hoarder. My team is a hoarder. We want to save every sample possible because you don't know what's coming next, what technology is coming next, and how you can use these samples again and again.

But of course, there's a limitation of space, right? We cannot store everything that we get. So we have come up with some policies where we do not store the RNA that is extracted from the samples. We dispose them.

We save a subset of the positive samples. So that, in the future, if we wanted to do more analysis or more sequencing with the samples, we can do that. But we have to be very systematic in how we store the samples in our minus 80 freezer because space is precious.

Well, after sequencing samples, we do keep some in our biorepository. But then those that-- I mean, like the products of all those reagents are the PCR and stuff that we didn't move on from sequencing, we basically just dispose them following the right biosafety procedures.