Transcript of interview with Ghada Alsaleh

GA: My name is Ghada Alsaleh. I'm new principal investigator at the Botnar Institute. I set up my lab a year ago and before that I was a post doc at the Kennedy Institute where I faced with my other colleague, what we called the pandemic of Covid 19.

The Kennedy Institute is most likely interested in inflammatory disease. The Botnar Centre is most likely interested in musculoskeletal research

I moved to Oxford five years ago to join Professor Katja Simon lab, she was interesting to understand how our immune system aged and how this might be impact on the vaccination in the elderly.

During the pandemic or just before the we start to hear about covid and about a little bit what was going to happen with lockdown and the lockdown was, I think for me and for many people around me, our concern was about the research. We have to stop the experiment even though they have started two years or three years ago and this was very important for many of us specifically for the PhD student who have to finish their work in a very specific time point.

The first thing we did is to continue meeting by Zoom or Team once a week as we did and I found it really very good because then we continue to be connected, not only talking about science in this time, we were talking about what happening in general and what we can change and what we can do.

And one of the things coming from a PhD student which I worked very closely with him and his name is Felix Richter and Felix with Katja Simon come with the idea, what we could do that we can't now go to the lab is to look at all the paper and all the articles which were coming as crazy in the fold of covid 19 and trying to analyse them and get some data. And from this point we start what we call the print journal club

So, we start with Oxford University, other universities were interested in UK – Cardiff University and also other universities in US. We were judging the paper – what is missing? Is the data useful to treat people or not? And one of the drug was the chloroquine and I write like a small review about how this drug is not really a good drug for the treatment and we have the opportunity to discuss this with the clinicians who were working in the clinical trial in Birmingham, so we really felt that we trying our best to help and to make things better to other people.

In the other parts what we also did, we tried actually to understand how is the immune senescence because we do believe that maybe the ageing of our immune senescence which make it more complicated to the elderly during covid and then we set a project and we get some fund to be able to do some experiment and this is what is really great because that mean I could go out of home and go back to the laboratory!

Unfortunately, the project didn't finish to the end because we work in healthy sample from young and elderly but we needed to confirm our data using covid sample from patient and the number of the sample were very limited.

But during this period it was very good actually and very important to see how the ageing of immune senescence might be important in the vaccination response. One of the things we started was a clinical trial. This clinical trial was most likely concerned elderly people who take covid vaccination and the idea was to see if we could increase autophagy using a supplement called spermidine.

We know that spermidine is very important for inducing autophagy; autophagy is important for the immune response and the idea from our clinical trial is trying to see the maintenance of the memory response to the vaccination because we know that the elderly were responding at least very well within this covid vaccination but we don't know if the memory response will maintain and will last. Why it's important in the elderly? Because autophagy goes down in the elderly.

We tried to take these immune cells from human and give them some spermidine and look at their effect. In this clinical trial, it's very small clinical trial where patient coming from Cardiff and Oxford…sorry, not patient – participant because they were all healthy elderly – we only have 40 participants; 20 of them having placebo and 20 of them having spermidine and then they all of the participants taking their third doses of covid vaccine – and then they start which we call it the baseline or the first dose and then they take spermidine where we collect the blood and then they take spermidine or placebo for two weeks and then we take blood again and then they take it again for 13 weeks and then we collect blood again and then they stop spermidine and then we have follow until 37 weeks.

This was a very nice collaboration between many people from Cardiff – Katja Simon which is my previous supervisor, and people from the vaccination group – Professor Paul Klenerman who's also involved in the clinical trial – and I can tell you that we are very excited that we could see some effect of spermidine on the immune response to covid vaccination.