**Alexander Ross** 

Behind The Mask

August 2, 2021

Barr: Good afternoon. Today is August 2, 2021. My name is Gabrielle Barr, and I'm the archivist at the Office of NIH History and Stetten Museum. Today I have the pleasure of speaking with Lieutenant Commander Alexander Ross. Lieutenant Commander Ross is a senior research nurse specialist at the National Institute of Nursing Research (NINR), and today he's going to speak about his variety of COVID activities and research at NIH. Thank you for being with me.

Ross: My pleasure.

Barr: As a nurse, how are you involved in helping the Clinical Center take precautions to thwart the spread of COVID-19 among patients and staff, as well as meet other needs that resulted from the pandemic?

Ross: I was involved last March 2020, when all of this really started going. There was a little bit of effort that started in February of 2020, trying to get prepared for what may be to come. I did a little bit in the beginning just trying to get my bearings and to figure out exactly what I could do best to help out. I've been here for seven years now, so I was relatively familiar with everything at the medical center. I found some areas where staff and patients were still getting in the building where they shouldn't have, so I was trying to make sure there were measures in place to get everyone to take this as seriously as possible, because people really didn't know what was going on then. I encouraged a lot of my colleagues—and a lot of patients—as we were beginning to wear masks, on the importance of that. It could be somebody as low or high on the totem pole as possible, but you really need to wear your mask. That was something that I felt very proud of being able to be a part of—to really tell people that they needed to do it in the very beginning, so I continue to do that today. I continue to tell everyone to wear their mask or wear it correctly if they're not wearing it correctly.

Barr: Did you ever get any pushback about wearing the masks, and how did you go about tactfully encouraging people?

Ross: Not so much about wearing the mask, but some people felt like they didn't necessarily need to go through the screening booths in the front. They may have a more important role. Or I may not have understood that they already have been screened somewhere else. There were some of those issues in the beginning. Now everyone gets a sticker and they get a mask when they first walk in. That wasn't exactly how it was going in the beginning. It was understanding that somebody may have been screened, but they had no proof they had been screened, and trying to respect however it was happening in the very beginning. Every day was basically a brand-new day, whether it was telling somebody who had come from New York that they were no longer to come in or asking somebody if they were on that cruise line—because that was the thing everyone was most afraid of in the beginning.

Barr: The Diamond Princess.

Ross: Yeah.

Barr: Were you one of the people that implemented the stickers when you walk through the Clinical Center, or was that done by another part of NIH?

Ross: That was the team I was working on. Coming up with the sticker system, we had to count how many people we were screening a day so that we knew how many stickers to create for every shift.

Barr: I wouldn't have thought of that.

Ross: Every little thing was not a little thing. Everyone had a job to help with. One person's job was to make sure that we had enough stickers for the entire day. You might run out of stickers, and then what do you do, if you had a busier day?

Barr: I saw that the some of the stickers are different colors; did the colors match to certain days of the week, or do they not mean anything?

Ross: Not as far as I know. We just had to make sure the stickers weren't the same color as the day before. Our main goal was that you could visually recognize that it was a new color the person was wearing. The people that are screening are probably different every day now, so it's probably not something that is as recognizable. We were working basically every day when this first started, so it was very easy for us to know that it was a different color sticker. Some people were working for four months with very little time off.

Barr: How did you get involved in the NIH screening effort, and what were some of your responsibilities in that role?

Ross: I reached out to my colleague, Captain Robert Cox. I was working with him on some other projects right before COVID-19 happened. I asked him if they needed any assistance and told him that I would really like to help out if I could. He connected me with Captain Ann Marie Matlock, who was in charge of the screening mission. I began working pretty much the day after I volunteered so it did not take much time to get into helping out. I didn't get to help out as long as I had thought because I was supposed to possibly deploy shortly after volunteering for this. I did not end up deploying on the mission that I was pulled to deploy to, though.

Barr: In addition to helping with the screening, you also have been doing some COVID research, so can you talk about the protocol you're involved in that's looking at individuals who've recovered from COVID-19 and their exercise routines?

Ross: We are collaborating with Rehabilitation Medicine [at the NIH Clinical Center] on a protocol that is COVID recovery patients, as you said. Participants come in prior to them beginning an exercise routine. They participate in a prescribed exercise routine, and then have another follow-up visit. We collect blood samples at every one of those time points. We're somewhere in the 20s as far as number of patients go. It is a very busy protocol; they do a lot when the patient comes in. They're here almost every day of the week doing a lot of things. There's a lot of different institutes involved with these patients. They're getting a lot of good information. The main thing we are trying to look at is the association of mitochondrial dysfunction related to COVID and how exercise helps with that.

Barr: That's interesting. How many patients do you hope to enroll in this study?

Ross: I don't know what their number is. I imagine it's probably around a thousand. That's usually the rough number, but I might be wrong. Don't hold me to that number. Somewhere between five hundred and a thousand is around where they usually would like to be.

Barr: What types of exercise are these patients doing—all different kinds of exercises or the same exercises every day?

Ross: My understanding is they're doing a maximum stress test like you would do at a cardiologist's office, where you would push yourself to the maximum. They figure out an exercise routine from that. They'll do the exercise routine at home and then they'll bring them back in for another follow-up visit or to do another stress test. That's how it's working, unless anything changed with the protocol since I last looked at it.

Barr: What has been your role with this study? Can you talk about some of the others and their roles? You said there's a lot of collaborators with this study.

Ross: We are involved in collecting blood samples. Our postbacs [postbaccalaureate] at NINR [National Institute of Nursing Research] are processing the blood samples. My role is just to help with coordination—to make sure that everyone's aware the patient is coming, the patients are on time, the samples are collected, and tracking to make sure that we got them where they needed to be within a certain time frame. There's two other collaborating institutes or two other labs. There's one other lab within NINR that is also getting samples. I work for Dr. Leorey Saligan's lab. Dr. Jessica Gill's lab is also getting blood samples. There's two other labs that are also getting blood samples for these patients as well, and they do the same thing we do. As far as all of the other things that are going on, I don't get to see all of those things because we're kind of more or less in the background. They're just interested in what our findings are as we get them with the samples.

Barr: What have been some of the challenges that you and the postbacs have encountered to date?

Ross: The Rehabilitation Medicine team is a very organized team. They're very good at making sure that everyone is communicated with about everything going on. We have the benefit of our office being right above Rehabilitation Medicine, so if there was something going on, we could always just run downstairs to see what's going on. We've tried to encourage the idea that more communication is better than less. If a participant has to cancel at the last minute, that would be one of the challenges. With this level of fatigue, they could have a need to cancel at the last minute if they don't feel like they could come in or they just don't feel up to it. We need to make sure that we're communicating that, because there are a lot of people that need to come into the building just for this one participant. That's just something we keep trying to touch base on—to make sure that everyone's phone numbers are up to date, everyone's getting the emails, and making sure nothing's falling through the cracks. We're working with them a lot to make sure that does happen.

Barr: Has that happened a lot—patients having to reschedule because they're so overtired?

Ross: Just a handful. It hasn't been too many. Most of the patients are coming in, but there have been a few that have been canceling the day before or a couple days before that. They aren't coming in.

Barr: With this protocol, was it any patient who's recovered from COVID-19 as its underlying requirements, or did the patients have to have a certain level of severity of the disease?

Ross: That I don't know. I can't answer that one

Barr: What have been some of your findings so far?

Ross: This protocol hasn't been going on for that long. We haven't done the analysis piece of it. We're still just collecting the samples. Once we have enough samples, we'll start doing analysis on the samples.

Barr: The premise is that COVID-19 affects the mitochondria? Can you talk a little bit more about that?

Ross: That's something that we're interested in in all of our protocols. It's just mitochondrial dysfunction related to any kind of insult—treating COVID-19 as an insult. We also we see a lot of patients who have gotten different types of cancer treatments or just any other long-standing disease process, such as lupus or chronic fatigue syndrome or sugars [diabetes]—anything that causes kind of an insult to the body—and seeing how the mitochondria changes over time.

Barr: Okay. That's interesting.

Ross: That's something with natural history studies in general. You'd like to see a baseline—where this is the study before the exercise—and how the exercise can help heal the mitochondria to make the body back to where it was before.

Barr: Are you involved in any other aspect of COVID research at NIH, or any other activities at NIH related to COVID?

Ross: We've added to our protocols that COVID is not an exclusion criteria for our protocol. We're trying to work around it that way. A lot of our protocols did say that if you have an active disease process, you would be excluded, so we're allowing patients who had COVID to participate but they can't actively have symptoms. There are a couple other protocols. There's one protocol that the PI [principal investigators] that I'm working with is trying to write. There's another protocol that another PI that we work pretty closely with is trying to model after the CFS [chronic fatigue syndrome] protocol that we probably will be involved with as well.

Barr: You have a lot of things potentially that you'll be working on! Being involved with different things, what is something that interests you, and that you think needs to be studied more in terms of COVID?

Ross: Trying to understand this fatigue is really one of the most important things, because everyone keeps hearing about long COVID and how fatigue is really the worst thing that people are dealing with—alongside all of the other symptoms that don't go away, like the loss of taste and smell and some of those other things. I do think that symptom research related to COVID is really important—getting people back to their sense of norm[al] that they had before. A lot of what we do here at NINR is symptom research. That's how people are going to start to feel like they're better—is to get these symptoms to go away. Trying to figure out how to do that is very difficult, so that's what we're doing.

Barr: Yes, definitely. In addition to helping with research and with screening, you've also been a person who has lived through this pandemic. What have been some personal challenges and opportunities for you presented by COVID-19?

Ross: I was thinking about this, and some challenges—and opportunities—have been that I had a son born in December of 2019.

Barr: Congratulations!

Ross: Thank you. If I hadn't been home because of COVID, I wouldn't have gotten to see him grow the same way. That has been a big opportunity for me—to get to spend a lot more time. Even though I was still working, I got to go up and visit him on my lunch break, whereas otherwise he may have been in daycare or something. I wouldn't have been able to hang out with him, so it has been a great opportunity that way. Everyone has the challenge that they've spent a lot more time at home than they're used to. I'm usually a pretty social person. As soon as I was given the opportunity to come back into the office, I jumped at it. Even though both of my kids are back in daycare now and I would happily be able to sit at home and have no distractions, I do like coming into the office and pretending life is as normal as possible.

Barr: What was it like for you initially? In your role, you really work in person, so what was it like for you to suddenly be off campus?

Ross: We did a lot of changing to our protocols right away. We tried to add all of the telehealth things to allow us to see patients remotely. We had to basically tell all of our patients we were actively seeking that; since we were a natural history study, we could not rationalize that they should come into building 10 [NIH Clinical Center]. We didn't want them to unnecessarily expose themselves just to give us a couple data points. We had to really be flexible and also understand that patients didn't feel comfortable coming in. We had to tell people that our research was not more important than their health and they should stay home.

Barr: Was that hard to convince people?

Ross: People were bored at a certain point. They wanted to come to NIH to do something. People feel NIH is a safe haven, so they really felt that if they were going to get out of the house, they could go to NIH and do some research. We had to tell them that we would love for them to come in, but we can't do it today. We've got a waiting list of people that really wanted to come in. It wasn't a challenge, we had to just be as honest as possible that we can't have them coming in for this right now.

Barr: Right. What was the telehealth like? Did you perform telehealth with patients?

Ross: We did a few telehealth visits. I think telehealth is great. People felt more comfortable at home talking about how they were feeling. Our interviews lasted a lot longer than they would, necessarily, in person. You obviously can't do as much of an examination on somebody that's sitting behind a camera, so you're not getting the full story. If somebody has worsening fatigue, for our studies, you could see them walking slower. If I'm seeing somebody behind the camera, I'm not going to get to see that. They could be very happy talking to me from their very comfortable computer chair or La-Z-Boy recliner, and I'll think they're just doing great, but they could have spent all day in that chair, for all I know. There are things that you don't really know that the telehealth changed, but it was easy to coordinate any time of

day to see somebody. The telehealth concierge service was very helpful with making sure patients were set up with their computers before we connected with them. They would always call the patients beforehand. It has potential, but I hope telehealth isn't necessarily here to stay—because we do like seeing people in person.

Barr: You get a better sense of them. What has been something—either an activity or something of that nature—that you love to do that has helped you get through the pandemic?

Ross: I have tried to get more into outdoor activities in general, like the rest of the world has. I was doing a lot of hiking last year and really exploring my backyard. It was the one place that when the numbers were the worst, I still felt comfortable not wearing a mask. It's kind of your one release—you feel like you could still smell the air and wave at somebody from across a body of water or something and say hello and still feel safe. As the restrictions were slowly lifted—I know they're coming back now—but as they were slowly lifting, you could see those same people again. You had your neighborhood network. That was nice. I also felt like it was important to me—I don't think it was as important to everybody else—but I like to get up and pretend like I was going to the office every day, even though I wasn't necessarily. I would still do my normal routine things. I'm one of those people that would always turn their camera on. I know a lot of people are still working on that. I like to just go through my day as if it's exactly how it was before. That has given me a little bit of a relief that things will be back to normal someday. It's important to say hello to people and show your face.

Barr: Is there anything else that you would like to add, either as a practitioner or as a person living through the pandemic?

Ross: Just that I think that the communication from NIH and leadership has been so amazing the whole way through. Without that, people would go down their own rabbit holes trying to think of what's going on. From when I was on the screening team up to now, the communication has always been really good—and so has the support for staff and patients. They've tried as many outlets as possible to cover how people are feeling. We've had a lot of mental health presentations. Any resource that you could have, NIH is trying to offer. That's great as a place to work—that you know you're not alone. I think that's important.

Barr: That's definitely important. Thank you very much. I wish you, your family, and your co-workers all the best. Continue to stay safe.

Ross: Alright, thank you. You too.