The Suppression of Your Innate Immune System by the COVID Vaccines
A Special Interview With Stephanie Seneff, Ph.D.
By Dr. Joseph Mercola

Dr. Joseph Mercola:

Welcome everyone. Dr. Mercola, helping you take control of your health, and today we're joined by a repeat guest, Dr. Stephanie Seneff, who is coming to us from the island of Kauai in Hawaii, which is her new full-time residence now. She's able to optimize her vitamin D naturally, the way it was designed to be: through sun exposure on your skin, not through swallowing supplements. Unfortunately, most of us living in the United States aren't able to do that because we go through a winter. Obviously, Hawaii has a winter too, but it's relatively mild and you can still get good amounts of vitamin D.

Dr. Joseph Mercola:

We have her back today discussing new paper she's written, and the paper's title is a mouthful. It's "Innate Immune Suppression by SARS-CoV-2 mRNA Vaccinations: The Role of G-Quadruplexes, Exosomes and Micro RNAs." As I said, it's a mouthful, but it really goes deep. We are so fortunate to have this woman who has absolutely not lost her critical thinking skills with us to help us understand some of the details of why this vaccine is absolutely, in no way, shape or form is safe or effective. It is the exact opposite of safe and effective.

Dr. Joseph Mercola:

There's very few people who have the scientific understanding and knowledge of molecular biology to break through the details and help explain why. She's so good that actually, I believe Dr. Malone quoted one of – it may have been this paper, but he quoted you in his blog recently. Of course, Malone is one of the most well-respected physicians out there in the COVID space and his interview with Joe Rogan on New Year's Eve. No, it was Christmas Eve or New Year's Eve? I forget which one.

Dr. Joseph Mercola:

But anyway, it had 50 million views, the largest podcast ever in the history of the world, which is just amazing. He's gotten a lot of flack from mainstream media trying to suppress him. He understands the brilliance of Dr. Seneff. With all that background, we're going to dive in. Welcome, and thank you for joining us today.

Stephanie Seneff:

Thank you so much for having me. It's my pleasure. I want to point out by the way that this paper that you're talking about-

Dr. Joseph Mercola:

You wrote it with Dr. McCullough too. I forgot. Oh my gosh.

Stephanie Seneff:

Although it is not published, it is not yet published, and I don't know whether we'll be able to publish it. We're jumping the gun here.

Dr. Joseph Mercola:

Well, McCullough is pretty well-known for that. In my mind, they're the top two physicians, McCullough and Malone.

Stephanie Seneff:

I think McCullough is fantastic and I'm so happy to have him collaborate with me. I really, really hope we will be able to find a journal that is willing to publish it. It is-

Dr. Joseph Mercola:

Yeah. But even if they publish it, he published an article recently with Jessica Rose, got published and then they retracted it.

Stephanie Seneff:

Right. We may have to seek some kind of extremely alternative media to get it published.

Dr. Joseph Mercola:

There's a number of ones out there. May not be a high-ranking journal, but you should-

Stephanie Seneff:

You're right, it won't be probably. It's just impossible to get past-

Dr. Joseph Mercola:

But even if it was in Nature or New England Journal, the mainstream would just tear it apart.

Stephanie Seneff:

I know, it's frustrating, isn't it? It's really incredible the amount of censorship that's going on right now. I'm in a state of shock all the time. I just keep thinking it's not going to get any worse, and it's truly going to get better, and it just seems to keep on getting worse and worse. I don't know where the end is. It's very discouraging.

Dr. Joseph Mercola:

It is quite surreal, unquestionably. You just say, “This can't be real.” I'm in some science fiction novel, dystopian novel.

Stephanie Seneff:

Exactly.

Dr. Joseph Mercola:

But we are getting some good news.

Stephanie Seneff:

We are, that's right.

Dr. Joseph Mercola:

The Supreme Court overruled the unconstitutional Biden mandates, except for health care workers, which is a loss. But for those of you who are health care workers and are in the predicament where you're forced to get this jab that we're going to talk about in a few moments, your only best alternative is to quit. If they force you, you have to quit, because there will be plenty of work for you to do.

Dr. Joseph Mercola:

There's no doubt in my mind that you will be able to collaborate and communicate and have this network of like-minded health care professionals who understand the truth about this, and will not accept the jab. Don't get the jab, don't get it.

Stephanie Seneff:

Absolutely not.

Dr. Joseph Mercola:

Anyway, we should dive into this paper. I've forgotten that it wasn't published yet. With respect to publishing, can you only submit it to one journal at a time or they allow multi-journal submission?

Stephanie Seneff:

No, it's extremely hard to publish, especially when you have something controversial. What the worst thing that can happen is that you submit it to a journal and they go through the review process, they get some reviewers. They sit on it for months, they finally come back with reviews, with lots of criticism and lots of – you do a whole big edit, and get a new version back, go through multiple rounds of review. This has happened to me, actually. The whole process can take like a year or even longer, and finally they reject it at the end of all that. It's just insane.

Dr. Joseph Mercola:

They did the same thing for my paper. It was, I think, five rounds of revisions and it took at least four or five months. By the last round, I was ready to just forget it. But my co-author Dr. William Grant was very persistent and wound up getting done. They didn't retract it.

Stephanie Seneff:

Yeah, that's amazing. That's the other thing is they finally accepted and then they retracted. We almost had that happen, the paper Anthony and I wrote. The first paper that I wrote on glyphosate together with Anthony Samsel, published in journal Entropy, which is a respectable journal. Although, of course, they started writing things, accusing Entropy of being a rag journal.

Stephanie Seneff:

The journal stood firm. They tried to get it retracted and then the journal stood up to them and refused to retract it. I'm very pleased about that. It's still there. But it's really hard. It's really hard when you're fighting in the mainstream and Pharma's got so much money behind their whole thing and they've got it all set up to make sure that nothing gets past them.

Dr. Joseph Mercola:

Yeah, they're the gatekeepers, for sure, for most of the mainstream journals. With respect to the rules of this, you can't post it publicly if it's still in the process of peer-review, can you? Unless you-

Stephanie Seneff:

Well, it's very interesting. The review process has changed quite a bit in recent times.

Dr. Joseph Mercola:

Perfectly. Okay.

Stephanie Seneff:

Even just before COVID, I would say, we started seeing these pre-prints showing up. I was quite shocked when I saw the first one, it was a pre-print service where this paper had been submitted to a journal under review, and it was published fully as a pre-print. People could read it and comment on it and everything else while it was going through the review process.

Stephanie Seneff:

Some of these papers show up as pre-prints and they get a lot of chatter around them. Then some of them, you keep waiting for it to show up in a mainstream journal or in some journal, and some of them don't, they just end up as a pre-print forever. It looks to me like at least-

Dr. Joseph Mercola:

But from the end user perspective, it doesn't matter really. It's available publicly.

Stephanie Seneff:

That is exactly what we're hoping to do is to put it up as a pre-print. But even that requires a process. Remarkably, they can reject it at the level of pre-print as well. We're working on that angle, but it's not easy. When you're writing something this radical, they really fight hard to keep it off the web.

Dr. Joseph Mercola:

It really isn't that radical, but it does-

Stephanie Seneff:

It shouldn't be. It's your science.

Dr. Joseph Mercola:

It strikes right at the heart of what they're trying to do.

Stephanie Seneff:

Absolutely.

Dr. Joseph Mercola:

It's hardcore molecular biology, and you've done a brilliant job of it.

Stephanie Seneff:

Absolutely.

Dr. Joseph Mercola:

Having written books and papers before, I know the amount of work that went into this article. It probably is the equivalent of writing a book.

Stephanie Seneff:

I know. We have really worked tirelessly on it for many months, and I'm very pleased with it, actually. I feel very happy about the outcome and the process that allowed us to figure out all this stuff is really quite fun. I love a puzzle and Lisa – glyphosate was a great puzzle, and now this is a great puzzle too, and it's also a window on biology because when you see what these things do to the system, you can observe what the effect is, and then you want to try to explain, "Well, why did that happen?" I'm always asking why, to try to understand what is going on here with these incredibly toxic exposures that are causing so many diseases. It's really quite remarkable. This is very much like glyphosate, only worse, I would say.

Stephanie Seneff:

When you look at the VAERS (Vaccine Adverse Event Reporting System) database, you can see the signal so strongly, and they know that. The numbers are out of sight. The number of reports in VAERS about really strange things happening in association with these vaccines and huge numbers of common vaccine reactions like migraine headache and fainting and nausea, all those things are happening in huge numbers, but of course, also death and various reproductive issues and even cancer.

Stephanie Seneff:

I've been looking at all the cancer data. On average, I would say twice as many hits associating these vaccines, these COVID vaccines with cancer, compared to all the vaccines together, over 31 years. You add up all the other vaccines over 31 years, and we have that in the paper, we have a chart on the data on cancer. It's just amazing, because it's overall two times. Breast cancer, for example, is three times as many hits for these vaccines in one year, as they are for all the other vaccines for 31 years. It's a hugely strong signal.

Dr. Joseph Mercola:

It's not typically appreciated. You're one of the rare people who really pointed that association out. When I first got your paper, my best friend's mother was just diagnosed with cancer.

Unfortunately, my best friend is a really excellent biohacker and really knows the science well, but cannot convince either of her parents to the truth about what's going on with these injections.

Dr. Joseph Mercola:

Both her parents are double-injected, and boosted, I think. Her mother came down with cancer and she's right now struggling with it. It's just totally – like most everyone else, fails to even consider that the jab was a variable.

Stephanie Seneff:

Right. I know. People don't think it could possibly be a variable, so they never report it. In most cases, they don't report it in VAERS. Even so you see that signal, the numbers are small for cancer because cancer is fairly rare, and the idea that a vaccine is causing your cancer doesn't make any sense. Even if you get your cancer right after the vaccine, you don't think the vaccine's related to it, so you don't report it in VAERS.

Stephanie Seneff:

But even so, there are these very strong signals, and the breast cancer, three times. It's injected near the breast, so I would think that would really impact breast cancer. There's also, lymphoma is showing up much more frequently with these vaccines and with the others. There's just an amazing signal there in VAERS. I don't understand why the government isn't alarmed by that. I just don't understand.

Dr. Joseph Mercola:

Well, I'm sure you really – that was a rhetorical question, you understand very clearly [crosstalk 00:12:06] But it's sad when you think about it, that they would go to this level of length to implement this type of strategy, and with complete awareness and not ignorance. The people in charge are not unaware of what's going on. They know fully what they're doing.

Stephanie Seneff:

It still puzzles me that they're willing to do such damage to the health of the whole population of the world. I don't understand that degree of evilness, I suppose is what I don't understand.

Dr. Joseph Mercola:

Well, I think we've got a good preface as to what this paper, why you started – one of your characteristics, clearly I've known you for a long number of years now, is that, as you said, you love puzzles, and this is the puzzle of our time to figure this thing out.

Stephanie Seneff:

It certainly is.

Dr. Joseph Mercola:

There's no question about it. You tackled one of the biggest challenges out there to figure it, from a molecular biology perspective. That was the motivation. Tell us how you put it together and what you came up with because it's a fascinating paper.

Dr. Joseph Mercola:

I don't know, we'll figure this out, if you'll be able to read the whole thing, it's like 40 pages. It's pretty much a mini book. This is dense scientific literature. You really almost have to have a degree in chemistry or biology to understand what's going on, because it's deep. But if you read it slowly and carefully, the information is there. You just did a brilliant job in compiling it.

Stephanie Seneff:

Well, thank you for that. Well, it started off with an interest. I don't know where we first heard about the possibility of a disruption of type-1 interferon. There's several different angles from which that turns out to be seen in evidence from the vaccines, from specific studies. I suppose the first study that tipped us off to that, it's a very good and interesting study done by some folks in India.

Stephanie Seneff:

What they did was growing human cells in culture. They exposed these cells to this DNA that allowed them to make spike protein. So, it's very similar to the vaccine. They provided them with these DNA nanoparticles that cause them to make spike protein. These were human HEK-293 cells. These are cells that were taken from the kidneys of a fetus some decades ago, like in the 1980s and have been maintained in culture.

Stephanie Seneff:

These cells are used a lot in these studies. They actually don't know what kind of cell they are, but they think they're kind of a neuron. They're like a neuron. They have neuron-like properties, even though they were taken from the kidney. Those cells, when they're told to make lots of spike protein, what they do is they release that spike protein inside exosomes. They release all these exosomes, which are these lipid particles, lipid nanoparticles, packaged up with spike protein. They insert into those exosomes other stuff.

Stephanie Seneff:

The exosomes are really, really fascinating, and I've been reading a lot about them lately. They're really a communication network for the cells. When a cell is under stress, it releases exosomes containing some of the things that are stressing it, is essentially what's happening. Those spike proteins are going out in those exosomes, combined with these micro RNAs.

Stephanie Seneff:

There were two in particular that were singled out in this article, miR-148a and miR-590. Turned out those two micro RNAs together, collaborated, they then exposed these microglia, which are these immune cells from the brain.

Dr. Joseph Mercola:

I think one of my roles here is to slow you down a bit, sorry. Our target audience doesn't have the background of molecular biology. Why don't you help – I'll point out some simple things where you can expand on it, that'll help make it easier to digest. What is a micro RNA?

Stephanie Seneff:

The micro RNAs are signaling molecules. They're RNA molecules, but they're very special and they're able to influence cell policy. They cause the cell to change its behavior, its metabolic policy, in terms of what it's doing dramatically from these – it actually suppresses, they typically suppress certain enzymes, specifically.

Stephanie Seneff:

There's lots of these micro RNAs, they all have numbers and it's a very complicated space, rather daunting space if you try to get into it, as far as reading about them. All of the parts of biology are quite overwhelming to the naive person, I think. It's really, really difficult to get a grasp of all these things. But there were these two particular micro RNAs that were put into those exosomes by those cells, by those neuron-like cells.

Stephanie Seneff:

Then those exosomes were delivered to these microglia, which are the immune cells. These microglia hang out in the brain. Of course, you've got neurons in the brain too. So, you're thinking of neurons producing spike protein, or even taking up spike protein, reacting to it by releasing exosomes, which are then picked up by these microglia, the immune cells of the brain. When the immune cells receive those exosomes, it turns out they turn on an inflammatory response, as a response to those micro RNAs, and of course, to that toxic spike protein that's in there. It sets up inflammation in the brain. Of course, inflammation in the brain will damage the neurons. There's no question, inflammation is the key factor behind multiple neurodegenerative diseases, inflammatory damage to the neurons-

Dr. Joseph Mercola:

Which you're going to go into later. But another definitional question with exosomes, isn't it true that the COVID jab is an exosome?

Stephanie Seneff:

Well, it's not, but it isn't-

Dr. Joseph Mercola:

It's like an exosome.

Stephanie Seneff:

But it's very similar. It's actually, I think more similar to an LDL particle. It's about the same size as an LDL particle. Of course, it contains lots of messenger RNA, lots of it. Exosomes can contain messenger RNA too, as well.

Stephanie Seneff:

There's a certain family resemblance, for sure, because they're both lipid particles. I think they're different sizes. I think the exosomes are probably quite a bit smaller. The vaccine particles are bigger. They're more like an LDL particle. They have cholesterol in their membrane, the vaccine particles, and they have lipoprotein. So, they're made to look like an LDL particle. But then they

throw in this cationic lipid, which is really, really toxic, a synthetic cationic lipid that makes it positively charged, and that allows it to – they've found experimentally that that lipid allows the vaccine, when the particle's taken up by the cell, it's released into the cytoplasm, and it gets going using that mRNA to make spike protein.

Stephanie Seneff:

They have designed these vaccines to be very – they're very cleverly designed, both in terms of protecting the RNA from getting broken down, and in terms of making the RNA be very, very efficient at making spike protein. They've done these two things that make it very different. It's very, very different from the messenger RNA that the virus makes, even though it poached for the same protein.

Dr. Joseph Mercola:

You wrote a paper on this too, didn't you, and that one got published?

Stephanie Seneff:

Yes, we do have that paper that Greg and I published, that's had quite a bit of exposure too. I'm happy about that.

Dr. Joseph Mercola:

We actually did an interview on that and you went into details of it. So, we'll probably put a link to that and even-

Stephanie Seneff:

Yes, that would be great.

Dr. Joseph Mercola:

It does tie in, it's a primer for this understanding-

Stephanie Seneff:

It is, it's a lot of overlap. Yeah.

Dr. Joseph Mercola:

This is the level two, the next step.

Stephanie Seneff:

Exactly, level two is right. Yes. Anyway, the immune cells, it's hard to know how to organize all of this stuff.

Dr. Joseph Mercola:

It's just so much information, right?

Stephanie Seneff:

That one paper that I started to talk about that ended up with the microglia producing inflammation in the brain, that paper looked very specifically at those micro RNAs and what they do. What it found was that those two micro RNAs that they identified as being primary are mRNAs that were put into those exosomes with that spike protein. Those guys are able to really mess up what's called type-1 interferon response in the immune cells, or in any cell, actually.

Stephanie Seneff:

Type-1 interferon response is absolutely critical as the first stage response to a virus infection. When a cell gets invaded by a virus, it sees, "Oh my God, there's a virus here, I need to do something." It releases this signal, type-1 interferon, and interferon alpha it's called or beta. Those are both type-1. It releases those signaling molecules, which then cause the neighbors, and of course, the immune cells in particular, to be informed, oh, there's a cell that's infected with the virus. That launches the immune response and gets it going very early in the viral infection.

Stephanie Seneff:

It's been shown actually, with COVID-19, that people who get severe disease often have compromised type-1 interferon response. It's very ironic that the vaccines are being given to protect you from COVID. Yet, they produce a situation where your immune cells are ill-equipped to fight COVID, if it gets into the cell. The trick is the vaccine produces tremendous antibody response, and that's typical of severe disease.

Stephanie Seneff:

The vaccine, it fools your immune system into thinking that you've had a severe case of COVID. It's really interesting that way because it's gotten passed the mucosal barrier of the lungs, it's gotten past the vascular barrier of the blood, into the muscle. Also, it's been disguised. The RNA doesn't look like a virus RNA, it looks like a human RNA molecule. Part of the trick of what they modify, the modifications, I mentioned that make it very sturdy, so it can't be broken down. Make it very good at making protein fast, which also has a problem because it leads to a lot of errors, which is another issue.

Dr. Joseph Mercola:

That also increases the number of antibody responses, right?

Stephanie Seneff:

Well, yeah, tremendous amounts of spike protein, you can't turn it off. You can't turn off the spigot because it's been designed that way. They've carefully chosen augmentations to the design of the RNA to make it very difficult, to stop it from making protein and very difficult to break it down. Sticks around for a long time. They don't know how long, but you could make estimates, and I think it could be even weeks, I think, that it could stick around, in the spleen, actually, it probably ends up in the spleen.

Stephanie Seneff:

The immune cells take up the nanoparticles, carry them through the lymph system, into the spleen. Multiple studies have shown that it ends up – highest concentration among the different organs, it ends up in the spleen. We've talked before about the ovaries as well. The ovaries, the

spleen, the liver, the bone marrow, these are all places where it ends up, aside from, of course, the main part that stays in the muscle. There's a lot in the muscle, but what gets carried away, gets carried into those critical organs that are involved in the immune response. The spleen, of course, is very, very important for producing antibodies.

Dr. Joseph Mercola:

Can we just step back for a moment and go to the antibody production. Because it seems to me that the level of antibodies being produced by these COVID jabs are exponentially higher than you would have from those received from a normal infection, orders of magnitude higher. It seems to be a pathologic response.

Stephanie Seneff:

Yes, I agree.

Dr. Joseph Mercola:

Can you comment on the increase? Because, if you look at these levels, compared to someone who's just infected normal, it's night and day difference.

Stephanie Seneff:

Right. As I said, it's basically – it's interesting, there was a study that showed that the levels of antibody responses on average go up with the degree of disease severity. When you have a really mild case of COVID, your body doesn't bother to make antibodies. It's like we don't need those antibodies because your immune cells are strong enough to fight it off without them. The antibodies-

Dr. Joseph Mercola:

When you say immune cells, you're referring to the innate immune system?

Stephanie Seneff:

Innate immune system, yeah. It's the innate immune system that's weak and that's when you get into trouble. Part of that weakness is an inability to respond with that type-1 interferon. If that response is suppressed, then your immune cells are not really very capable of stopping the spread of the virus in your body. Then-

Dr. Joseph Mercola:

A question on type-1 interferon, because both you and Judy Mikovits have been strong advocates of this, but yet, I have, to this day, ever seen it recommended in any of the protocols that are being passed around by physicians who are really good at understanding this like Dr. Corey, Dr. McCullough, FCC, and a wide variety of other groups. I've never seen interferon recommended.

Stephanie Seneff:

Yeah, that's interesting. I think-

Dr. Joseph Mercola:

Other than you and Judy, that was it.

Stephanie Seneff:

I see. There are some studies, and I think there are some confusion about it, because it's quite interesting that if the type-1 interferon is occurring early on, it's supposed to be right away at the beginning of the infection that you turn on that type-1 interferon, your body does it naturally, if your cells are infected with the virus.

Stephanie Seneff:

Then people who have a weak version of it, the virus takes hold and multiplies. In fact, there have been studies, I think, on rats and mice where they're trying to figure out if they can supplement type-1 interferon and make it beneficial. But apparently, it's complicated because if you put the type-1 interferon in at the wrong time, in the whole phase of the system, it cannot work out the way you expect it.

Stephanie Seneff:

It's really complicated biology with the immune system. The immune system is so complex, it's amazing. But I think just like you say, ivermectin and hydroxychloroquine need to be given early, early in the infection. I think that's the same thing with the type-1 interferon. I think what happens is, by the time somebody's got really severe disease, it's too late to use that therapy. You have to be able to anticipate they're not going to be able to fight off the virus on their own, early one.

Dr. Joseph Mercola:

Then if you have to use it early on, you may as well use simpler, or less expensive and easy to obtain interventions.

Stephanie Seneff:

That's probably why, yeah.

Dr. Joseph Mercola:

And nutrients. Okay.

Stephanie Seneff:

Right. But it is interesting because, my impression is that the immune cells don't know what the hell's going on. They're like, “Oh, there's this crazy-” Neuron is a toxic protein, probably unlike protein, that's being produced in massive amounts by the immune cells. That's just extremely unusual. There's no sign of any kind of viral infection because these RNAs look like human RNAs. It's as if the human cells suddenly decided to make a really toxic protein, and make lots of it, and it's an immune cell. That's just like-

Dr. Joseph Mercola:

Well, that's what they're doing, the human cells are created as-

Stephanie Seneff:

It's exactly what they're doing. And the immune system is completely baffled by this, I suspect. They have no clue what to do with it. Of course, these immune cells that are overloaded with all this spike protein, that's what they do is they say, "I got to get rid of this stuff," so they ship it out as these exosomes. They put things in there. It's so fascinating with these micro RNAs that they think that the recipient cells are going to need those particular signaling molecules to help it do whatever it needs to do to cope with this toxic load that you're delivering to them.

Stephanie Seneff:

So, you're spreading the spike protein around to the rest of the body to try to just dissipate the toxicity that you're coping with in the spleen, I think. Then the antibodies, and also of course, send it out on, actually, those exosomes are very good for training antibodies, and that's another thing. There was a nice paper that showed, in fact, exosomes being released, exosomes containing spike protein showing up in their membrane, in the exterior of the exosome. It's quite cool that the spike protein is displayed there, which allows these immune cells, the B-cells and the T-cells that need to get up close and personal to it, to figure out how to shape their antibodies.

Stephanie Seneff:

The antibodies get shaped to match the toxic protein that's exposed on the surface of the exosomes. These people, they were showing the exosome showing up, and then after something like 14 days of the second vaccine, I think the exosomes induced an antibody response, that they felt the exosomes played a critical role in this extreme antibody response that was produced by the B-cells and the T-cells, the adaptive immune system. It's pretty interesting.

Stephanie Seneff:

But I think the way the vaccine works is that there's no game that you can choose other than to make antibodies. It's the only way you can fight this. It's just a toxic protein that's being produced and released by these immune cells. The only thing you can do to stop it is to make antibodies. They try to make lots and lots of antibodies that will glue onto those toxic spike proteins, and actually block them from being able to get in through the ACE2 receptor. That's the job of the antibodies. They do a good job of it, initially, with those extremely high antibodies. It's true that they do protect you from disease.

Stephanie Seneff:

But unfortunately, the antibody levels drop pretty dramatically pretty quickly. After three or four months, they're down quite a bit lower. There are these other antibodies that are enhancing antibodies, as you know, and they don't drop quite as fast. There's a crossover point at which the enhancing antibodies can be stronger than the protective antibodies, and that's when you can get this antibody-dependent enhancement (ADE) that people have seen in the past with coronavirus vaccines. We're still trying to see if that's the case with these vaccines. There is some evidence here and there, but it's not-

Dr. Joseph Mercola:

We haven't seen the other data yet.

Stephanie Seneff:

Not sure yet. Yes. But it's in there.

Dr. Joseph Mercola:

Who knows, because typically you would expect it when we certainly had the surge of Omicron, but it doesn't seem to be generating a severe response. It seems to be a much less pathogenic variant. People have not been dropping from ADE, like some-

Stephanie Seneff:

I know, people have been predicting that for quite some time and I've been watching for it, and we haven't necessarily seen it. Although there was a hospital in Israel where they had an outbreak of COVID-19, and they actually had five deaths of people who were fully vaccinated in that outbreak. That looked like evidence of ADE, but it hasn't been seen clearly in other studies so far. We're still looking for it. People keep thinking it's going to happen, we're still looking for it.

Dr. Joseph Mercola:

What do you think is the range where it could occur biologically?

Stephanie Seneff:

What do you mean the range? In terms of the time?

Dr. Joseph Mercola:

The range of time, after the last injection?

Stephanie Seneff:

What I would've expected is that as the antibodies fade and the protective antibodies fade faster, which is what they have seen in studies, at some point, you'd reach the crossover point where you still had those enhancing antibodies at higher levels and the suppressing antibodies at lower levels, such that then they would turn out the other way around, that the enhancing antibodies would enable the entry of the virus more readily than not having any antibodies at all.

Stephanie Seneff:

It's a chasing game between the enhancing antibodies and the suppressing antibodies. It's quite curious to me that the immune system does this, and that's something that's puzzled me. I want to understand, I believe everything in the immune system has a purpose. It is designed to work properly with the body as it is. One thing-

Dr. Joseph Mercola:

It is, but we just don't understand it.

Stephanie Seneff:

No, there's a lot we don't understand that frustrates me when I can't get the answer, I have to say. Yes.

Dr. Joseph Mercola:

Maybe you can go over some of the downsides of the vaccine, of the jab. It really isn't qualified to be called a vaccine, I don't think.

Stephanie Seneff:

No, I don't-

Dr. Joseph Mercola:

Unless you change the definition like the CDC (Centers for Disease Control and Prevention) did to qualify it.

Stephanie Seneff:

Well, I should go into this interferon thing because with this-

Dr. Joseph Mercola:

Go into the interferon.

Stephanie Seneff:

There was that one study from India, which I think was what tipped us off on this idea of the interferon problem. Then we found a study from China, actually, Shanghai, China, a long list of authors, and they did a good job of tracking, what does the vaccine do to the immune system over time? Looking at people who got vaccinated, looking what they had before the vaccine, and then what they had at different stages, after the first vaccine, after the second vaccine. They did a very interesting study and they, too, found out that the – they found that the infection was causing increase in what's called CD8+ T-cells, those are really important cytotoxic T-cells that can actually remove cells that are infected.

Stephanie Seneff:

They're very important as part of the defense against the virus. CD8+ T-cells were enhanced in response to the disease, but not in response to the vaccine. Then they also saw this type-1 interferon suppression showing up with the vaccine, which was very puzzling and disturbing because that's going to interfere with not only the COVID-19 infection, you need type-1 interferon response right away to get good control early on. You also need it for a lot of other viruses, and you have a lot of latent viruses like herpes and the shingles virus of varicella, which is from shingles. Both of those, herpes and shingles are showing up with a strong signal in the VAERS database. People getting those infections.

Dr. Joseph Mercola:

Does coronavirus have the potential to go into a latent phase, like herpes?

Stephanie Seneff:

Good question. I don't know. I actually don't know.

Dr. Joseph Mercola:

I don't think it does. Because herpes is a DNA virus, isn't it?

Stephanie Seneff:

Yeah. I think you're probably right, that it does not. Because I haven't heard anyone talking about latent COVID. So no, I don't think so. The coronaviruses probably get cleared following the disease. But these latent viruses are waiting around, just sitting around doing nothing, not really harming you until you have a weakened immune system.

Stephanie Seneff:

When that type-1 interferon response is low, you get increased risk to infection with other things, and you also get an increased risk to cancer, and that's something we talked about quite a bit in the paper is the consequences of the reduced type-1 interferon causing increased risk to cancer. There's a lot of papers about that whole story that we referenced in our paper.

Dr. Joseph Mercola:

Which is interesting because clearly it increases your risk of cardiovascular disease, is something people are [crosstalk 00:34:18]-

Stephanie Seneff:

Absolutely.

Dr. Joseph Mercola:

But the number two cause of death is cancer. It's interesting to hit both of those.

Stephanie Seneff:

Yes, right. The cardiovascular disease is also related to this whole thing with the exosomes, that is very clear to me. There was a paper that showed another exosome, miR-155, which was showing up in response to COVID. These exosomes are being released by stress cells in general when you're sick. But there's different ones that are released under different conditions. But those are the three that I've identified, miR-155, and I mentioned 148a and 590, the two that were shown in that experiment by the people in India.

Stephanie Seneff:

But miR-155 is really, really critical for the heart. When you get inflammation in the heart, if you expose the heart to miR-155, which was found in exosomes that were released in response to COVID-19. I'm guessing that it would also be in exosomes that are released in response to the vaccine. Those exosomes taken up by the heart are very good at causing myocarditis, they're going to cause the myocarditis.

Dr. Joseph Mercola:

Can you explain that mechanism, how it does that?

Stephanie Seneff:

Well, again, it's basically that the micro RNA suppresses certain proteins that then causes a cascade response. It's really complicated with all these different signalings that go on inside cells. But when a particular protein that's a critical player gets suppressed by a micro RNA, then a whole different policy takes off inside the cell to do something very different from what they were doing before.

Stephanie Seneff:

This inflammatory response involves releasing reactive oxygen species and causing damage to the cells, inflammation, which then has a whole other cascade of things, fibroblast, all kinds of things start happening in response. Of course, in the blood, when you get this inflammatory response, you can end up with blood clots, and that's another thing that these vaccines cause, inflammation in the blood, which can then trigger blood clots. The platelets play a very important role, and lots of interesting things happen to them in response to these vaccines.

Dr. Joseph Mercola:

Sure. Does a micro RNA catalyze the inflammation or is there an autoimmune component to it also?

Stephanie Seneff:

Well, there probably is an autoimmune component as well, and that's another whole area that's important because the vaccine produces extremely high levels of antibodies. Those antibodies are, to a protein that has many different segments, a sequence is in it that are also found in a number of different human cells that are related to autoimmune disease.

Stephanie Seneff:

Kanduc has written a lot about this, K-A-N-D-U-C. I think she's a woman. She's an expert on these antibodies, and finding so many different sequences within the spike protein. The spike protein is very overlapsed with human protein. That means when you build a really strong antibody response to the spike protein, those antibodies can get confused and they can attack a human protein that has a similar sequence. That's a classic form of autoimmune disease. It's called molecular mimicry.

Dr. Joseph Mercola:

Is that typically later stage though? It's not as acute?

Stephanie Seneff:

It should have happen over time, it should be slower, yes. It should start to show up later on. That could also end up with things like multiple sclerosis, attacking the myelin sheath because of similarities between the sequence of amino acids in the spike protein compared to these other proteins that are known to be connected to all these autoimmune diseases.

Stephanie Seneff:

There were many, I think, in fact, there were many different proteins that matched. It was quite surprising how many different matches there were within this spike protein. It seems to be very well-designed to induce autoimmune disease, if you produce antibodies to those sequences in the spike protein.

Dr. Joseph Mercola:

Now, what about the – I'm sure we're going to go into the neurological components, but I'm thinking of many of the case reports I've witnessed, and video reports, actually, and they seem to be mostly women where they develop this side effect of uncontrollable tremors and shaking.

Stephanie Seneff:

I saw that. Yes, absolutely.

Dr. Joseph Mercola:

By a large number of people, mostly women, as I said. That can't be fake. Do you have an idea what the mechanism might be there?

Stephanie Seneff:

I actually feel there's a very strong signal for the idea, which I'm pushing this idea that you have those immune cells in the spleen, making spike protein, releasing it in exosomes. It's been shown in studies on Parkinson's disease, that those exosomes travel along nerve fibers and they'll go along the splanchnic nerve, they'll hook up with the vagus nerve, they'll go up to the brain and they'll get into all these different nerves in the brain.

Stephanie Seneff:

In fact, when you look at the VAERS database, you see tremendous signals for all kinds of things that suggest different nerves being inflamed. For example, tinnitus, this huge hit, and I have the numbers here, I think for tinnitus, 12,000 cases of tinnitus associated with the COVID-19 vaccine.

Dr. Joseph Mercola:

As reported. Obviously anywhere from a minimum of five to 40 or more.

Stephanie Seneff:

Right, exactly. That's only what's reported. Tinnitus is a strong signal. Tinnitus is going to be inflammation of the auditory nerve. This means you have to go all the way from the spleen, I think, up the vagus nerve and then connecting up to the auditory nerve to cause a tinnitus. Then you have Bell's palsy is inflammation of the facial nerve, and you have migraine headache. There's huge counts on migraine headache, over 8,000 cases of migraine headache, and also many cases of just plain headache. Migraine is linked to an inflammation of the trigeminal nerve.

Stephanie Seneff:

You've got all these nerves that are in the head that are connected to the vagus nerve, which comes up to the brain stem, and then it just keeps on moving along these nerve fibers. It probably

also goes, I'm suspecting, along the nerve fibers of the spinal column, which can then cause some of these cases where they're finding paralysis. People have a lot of mobility issues connected with these vaccines.

Dr. Joseph Mercola:

I can understand paralysis, but it's almost like a seizure, these recurrent tremors, they're persistent.

Stephanie Seneff:
Yeah.

Dr. Joseph Mercola:

It's like there's some type of-

Stephanie Seneff:
It is like a seizure isn't it?

Dr. Joseph Mercola:

-dysfunction, it seems like it.

Stephanie Seneff:
Yes.

Dr. Joseph Mercola:

Interestingly, almost every one of the physicians that are responsible for helping these people are unable to figure anything out. They call them a functional, psychogenic reaction to having gotten the jab.

Stephanie Seneff:

Okay. They think they're so terrified, that they're shaking with fear.

Dr. Joseph Mercola:

Yeah. They're just shaking uncontrollably because they were afraid they got it.

Stephanie Seneff:

Right. Well, I see the possibility of causing a lot of disturbances to the myelin sheath, and we talked about that in the paper. That's quite interesting, and it involves, again, complex signaling. There's so much complicated signaling that goes on in biology, but you can get to the myelin sheath problem through the type-1 interferon disruption. That, again, it involves something called an interferon response factor 9, IRF9, which this protein triggers the production of

sulfatide in the liver, and this protein gets suppressed by these micro RNAs that I mentioned earlier.

Stephanie Seneff:

When that protein gets suppressed, sulfatide synthesis gets suppressed. The liver makes most of the sulfatide in the body and distributes it. Actually, the blood cells carry a lot of sulfatide, like the platelets. Sulfatide's an interesting molecule because it's the only sulfonated lipid in the body. Of course, I'm very much into sulfate, as you know. I think sulfatide is an important lipid carrier.

Stephanie Seneff:

But the myelin sheath contains lots of sulfatide, and that's part of what protects it, what keeps it safe. That sulfatide becomes eroded. It becomes eroded in association with de-myelinating diseases. I think the myelin is being attacked, is really being hurt badly by the vaccine on those nerve fibers, where these exosomes are traveling and delivering spike protein and causing a lot of inflammation and causing disruption of the signaling processes that results into deficiencies and certain critical molecules, that leads to things like multiple sclerosis, for example, with the myelin, but also other de-myelinating diseases.

Dr. Joseph Mercola:

I was intrigued and surprised at the same time when you mentioned that the number of people with tinnitus was 12,000, which is extraordinarily high. From my deep dive into EMF (electromagnetic fields) exposure, that's probably one of the most significant symptoms that people have.

Stephanie Seneff:

Interesting.

Dr. Joseph Mercola:

Yeah, it's tinnitus. I had a person who was a mold or mediator, I had some damage in my laundry room and he was an expert, came in and did, and we started talking and he told me he had tinnitus, I was writing a book at the time. I brought him into my bedroom, which is completely shielded from all EMFs. Guess what happened to his tinnitus?

Stephanie Seneff:

It went away?

Dr. Joseph Mercola:

Disappeared. Yeah.

Stephanie Seneff:

Wow.

Dr. Joseph Mercola:

To me, that was a really powerful indication that that's a factor. The reason I'm mentioning this is, from my deep dive into it, I learned that – because like you, I like puzzles and I want to figure it out. It seemed to be mitochondrial dysfunction that was the primary driver.

Stephanie Seneff:

Interesting.

Dr. Joseph Mercola:

Any effort you can to repair, restore and regenerate the mitochondria seems to improve it overall. I know you are pretty well up-to-date on the mitochondrial function. I'm wondering if you think there's – from your deep dive on the jab, if you think there's any connection there targeting the mitochondria specifically?

Stephanie Seneff:

I think there surely must be, and I should probably look into that more, because I'm a little bit – not sure how to say that, but of course, inflammation leads to oxidative damage, which leads to mitochondrial damage. Certainly, any kind of reactive oxygen species are going to harm the mitochondria.

Dr. Joseph Mercola:

Yeah, for sure. I think that, to be concerned that I want to talk to you offline is this long-haul COVID. One of the most pervasive symptoms of that is fatigue. Clearly, if you're-

Stephanie Seneff:

That's mitochondrial damage.

Dr. Joseph Mercola:

-responsible for generating cellular energy is compromised, you're going to be tired.

Stephanie Seneff:

Right. Well, actually, the study that was looking at the effects of the vaccine was quite interesting that they saw the beginnings of diabetes, Type 2 diabetes, if they had elevated blood sugar.

Dr. Joseph Mercola:

Which study was this, now?

Stephanie Seneff:

This is the study in China. It was a really interesting study that looked at people before and after their vaccines, and what happened-

Dr. Joseph Mercola:

Oh, this is post-vaccine, there was an increased risk of diabetes, Type 2.

Stephanie Seneff:

Yes.

Dr. Joseph Mercola:

Interesting. That would be a fascinating study to do, because you don't have to have outright diabetes. That's defined as a fasting blood sugar greater than 125. But you could just do regular fasting, blood sugar's pre-imposed-

Stephanie Seneff:

Right. That would be a great study.

Dr. Joseph Mercola:

-jabs. That would be a marvelous study. Who would've thought? What you're saying is, most likely you're going to see a very serious increase.

Stephanie Seneff:

I expect so. We'll see. It's all going to take time. When Greg and I wrote our first paper, we were thinking in terms of prion diseases and neurodegenerative diseases, Alzheimer's. We were predicting it could take 10, 20 years or even more before you'd actually see the effects. It can take a long time to notice it because these things happen slowly.

Stephanie Seneff:

The Parkinson's is a slow process that starts off long before you have symptoms, you have evidence of this alpha-synuclein problem, this folded alpha-synuclein in the spleen. It starts to show up in these other organs and eventually makes its way to the brain. We don't really know how long it's going to take before the effects of these vaccines become apparent. Of course, we may have forgotten to look for it by the time it happens. If we start seeing elevations, I think we're going to see people getting these neurodegenerative diseases earlier and earlier in life, than they used to.

Dr. Joseph Mercola:

Well, these women I was talking about with those tremors and seizures, seizure-like muscle contractions, it almost looked like Parkinson's disease-

Stephanie Seneff:

Yes, that's what I was thinking.

Dr. Joseph Mercola:

That would be acute.

Stephanie Seneff:

Parkinson's disease has shakes associated with it. I think a lot of this could be Parkinsonian-like symptoms. One thing I will say, actually, the olfactory nerve, I was looking at all these different

nerves, looking for VAERS data on things that would indicate an inflammation in these various nerves in the head to try to see if this exosome idea made sense.

Stephanie Seneff:

The olfactory nerve is quite interesting because you know that COVID-19 causes a loss of sense of smell for many people, that's one of its very classic symptoms. The vaccine causes that too. In fact, there was really, a huge – I was really surprised, I think, what was it? Thirty-six times as many cases of loss of sense of smell for the COVID vaccine, compared to all the other vaccines together over 31 years. Thirty-six times.

Dr. Joseph Mercola:

That sounds like the same increase in death rate.

Stephanie Seneff:

Yeah, it's 36 times as much as everything else together over 31 years. That's just mindboggling, right?

Dr. Joseph Mercola:

It is mindboggling.

Stephanie Seneff:

It's so huge. This really means that it's inflammation in the olfactory nerve, which, of course, loss of sense of smell is an early sign of Parkinson's disease. It looks like-

Dr. Joseph Mercola:

I did not know that.

Stephanie Seneff:

-we're moving towards a Parkinsonian. Yes. Also, the Bell's palsy, which is the other one that shows up with the – Bell's palsy, which is from inflammation of the facial nerves, but probably often caused by herpes, reactivated herpes or even varicella, they can cause Bell's palsy. That's a huge signal. That's also a risk factor for Parkinson's disease. Even dysphagia, not being able to swallow, that's another one, there were a bunch of those, 4,650 cases of dysphagia, inability to swallow, which is also a sign of Parkinson's disease.

Stephanie Seneff:

I think all those things that are signals for Parkinson's. Even just immobility, just losing the ability to walk, that's happening as well. That might be from inflammation in the spinal column, I don't know. It's hard to figure out what's – I just think it's traveling all over the nerves and causing quite a huge problem everywhere, but it really goes up.

Stephanie Seneff:

The Parkinsonian studies have shown that the Parkinson's, they've really done a good job of showing that you can get pathogens in the gut that are producing a prion-like protein, which is

what the spike protein is, a prion-like protein. Then the immune cells take it up and take it to the spleen. Then, this is, of course, causing them stress. A stressed immune cell in the spleen upregulates, produces more alpha-synuclein. Alpha-synuclein is actually a molecule that fights infection, and that's the molecule that misfolds in association with Parkinson's disease.

Stephanie Seneff:

It's so interesting. I'm so fascinated with all of these molecules that are prion-like. There's the prion protein itself, but then there's the alpha-synuclein, amyloid beta, there's TDP-43, which is associated with ALS (amyotrophic lateral sclerosis), and of course the prion protein is associated with CJD, Creutzfeldt-Jakob disease. All of those diseases are overrepresented in the COVID database, the VAERS database for COVID, compared to all the other vaccines combined over 31 years. It's just completely out of line with the number of-

Dr. Joseph Mercola:

What are the numbers in these prion-like diseases?

Stephanie Seneff:

I have some numbers here, actually. Let me just get this up here.

Dr. Joseph Mercola:

Because normally you wouldn't anticipate it this early on, which is far down the road.

Stephanie Seneff:

They're very small numbers, very, very small numbers. That's the thing, very rare. Very low counts. But Alzheimer's is 58 in association with the COVID vaccines and 13 in association with all the other vaccines over 31 years, 13. That's several times more.

Dr. Joseph Mercola:

Not 35, yeah.

Stephanie Seneff:

Fifty-eight versus 13. CJD is also much more common, it's actually almost seven times as common in the COVID vaccine. CJD is Creutzfeldt-Jakob, that's a terrible disease and you die after a few years, get very crippled. That's the classic prion protein. That's extremely rare. Only one person in a million gets CJD. It's very, very rare.

Stephanie Seneff:

There was a person who contacted me from France whose wife got CJD just a few weeks after the second vaccine, developed CJD. He was absolutely convinced the vaccine caused it. There are actually 27 cases reported in VAERS for the COVID-19 vaccines against only four cases over the entire history of the other vaccines.

Dr. Joseph Mercola:

All the vaccines combined.

Stephanie Seneff:

Yeah.

Dr. Joseph Mercola:

It's pretty compelling.

Stephanie Seneff:

That's also very big – yeah, almost seven times as much. Very small at first, because people don't know it's connected, they don't report it.

Dr. Joseph Mercola:

That's a huge component. But your projection is that this is likely to increase by 10- to 100-fold over the coming years.

Stephanie Seneff:

Yeah. You have things like dysphagia, which is difficulty swallowing. Very much connected to Parkinson's and that's 6,000 cases. Those are showing up much more commonly.

Dr. Joseph Mercola:

That is a good point too, because the cases that are being reported, and really displayed on some social media, alternative social media, are ones that where it's really obvious. But there's a progression of disease that you could have a mild case and you may not even attribute it, or may not even notice it.

Stephanie Seneff:

Yes.

Dr. Joseph Mercola:

It's not an on/off switch. There's a whole gradations of it.

Stephanie Seneff:

Right. I've gotten email from people who've shared with me their horror stories about their loved ones. There was one that talked about Parkinson's. The person had Parkinson's, got the vaccines and then within a short while, progressed really rapidly and died with the Parkinson's. It's going to accelerate. I think anybody who already has any of these diseases is going to have accelerated progression.

Dr. Joseph Mercola:

That's got to be a black box warning on these things. There's a lot of things, but that clearly is one of-

Stephanie Seneff:

It certainly should be. They're going to have such a big black box warning. They're going to have pages of it in small print. It's amazing how many things that-

Dr. Joseph Mercola:

Maybe they just don't think black box warnings mean anything anymore.

Stephanie Seneff:

Make them so long, nobody wants to read them. It's very discouraging. I just don't understand why there aren't more people who are recognizing how unsafe these vaccines are.

Dr. Joseph Mercola:

Well, that's a rhetoric question. You understand very clearly.

Stephanie Seneff:

You tell me.

Dr. Joseph Mercola:

Because you do, you're a smart cookie. You know why they're doing this thing. It's sad. We just want to be in disbelief because, to fully acknowledge that level and depth and perversion, you just want to cry.

Stephanie Seneff:

Yes, I suppose so. I suppose most people just don't want to go there. Don't want to admit the world is that bad, that people are that evil.

Dr. Joseph Mercola:

But it is. But I think more and more, we're seeing this. It's just, these are very interesting times. We're seeing this transition of the middle group of individuals who are not brainwashed completely, and are open to this. I think they're starting to see this and the resistance to implementing this strategy is starting to increase.

Dr. Joseph Mercola:

But we need that hard data. I keep diverting from – it's not really hard data, but it's more actually plausible, biological mechanisms of why this is happening, and you do that better than anyone I know of.

Stephanie Seneff:

Yes. That's my game, and that's really what I want to do is to just, I want to figure it out for myself personally, just to understand. When I see something that can cause that much damage, I want to really try to understand why. Of course, I have the larger goal of understanding how biology works, which we're making progress on that.

Dr. Joseph Mercola:

The reason for that, it's not just some esoteric, academic tickle that you have. Once you understand the way something causes disease or pathology, then you could implement effective strategies to circumvent it.

Stephanie Seneff:

Exactly. So. Right.

Dr. Joseph Mercola:

Or treat it, or, at least I clearly, these types of disease, like Parkinson's should be a black box warning, and pretty much, would you agree, almost every other autoimmune disease? You've got those, you cannot-

Stephanie Seneff:

I think so. I think pretty much all cancer, certain ones more than others, but pretty much all cancers are going to be enhanced by these vaccines and autoimmune disease, neurodegenerative disease and reproductive issues. Gosh, I just got an email from someone who's gotten really obsessed with the whole issue of reproductive system.

Stephanie Seneff:

You and I talked before about the ovaries. There was a study in Japan, and I think Pfizer was involved, that showed the spleen getting the highest level in response to the vaccine in the arm, showed up in the organs highest in the spleen. Next was the ovaries, number two in the females, which was really disturbing to me because the ovaries, of course, that's where reproduction happens. If you're going to put inflammation in the ovaries, it's certainly not a good thing. I can't imagine much worse than getting the ovaries-

Dr. Joseph Mercola:

Well, there have been actual reports of 80% miscarriage rates in the first trimester.

Stephanie Seneff:

I saw that, yes. There's a lot of reports in VAERS related to fetal damage and miscarriage and those sorts of things. I expect we're going to have the clinics to help people who are infertile. Infertility clinics are probably going to be booming in the coming-

Dr. Joseph Mercola:

It's going to be an explosion for fertility-

Stephanie Seneff:

I suspect so. We'll have to see. Also, gosh, there were some cases in VAERS with swollen testes and things like that, which that doesn't sound good. That means that it's going into the testes, which I would be surprised if it didn't because it really is going to those organs that are-

Dr. Joseph Mercola:

What's your speculation? Obviously, it can cause death to the existing fetus. But what is the impact on long term fertility rates? Do you think it's actually killing these eggs that are in the ovaries?

Stephanie Seneff:

I don't know. People are talking about syncytin. I think you're probably aware of that. I think Judy Mikovits talked about that.

Dr. Joseph Mercola:

She talks a lot about it.

Stephanie Seneff:

Quite fascinating, because there is a connection there.

Dr. Joseph Mercola:

I think it's-

Stephanie Seneff:

I don't pronounce it right, probably, [inaudible 00:57:19]

Dr. Joseph Mercola:

-cytin, I think is what – it's not a common word, but she says it so well all the time.

Stephanie Seneff:

Okay, syncytin, yes, because that has similarities and there's a worry that people would develop antibodies, I think, to syncytin, is what they're thinking, and that's essential for the fertilization, I think it is. Or the placenta or something. I don't know the details well enough on that one, but I-

Dr. Joseph Mercola:

That makes sense. You reminded me of Judy's explanation on that. There might be an antibody response, which impairs the body's ability to-

Stephanie Seneff:

I think is implantation-

Dr. Joseph Mercola:

Implantation.

Stephanie Seneff:

-is disrupted.

Dr. Joseph Mercola:

Support the pregnancy is whatever-

Stephanie Seneff:

Can't be implanted in the placenta. I think that's what it was, which I think is possible. We'll have to just wait and see. We're going to have a lot of interesting data coming out. I'm waiting for the death rates too. I really want to see causes of death in 2021, compared to previous years, which ones are going up?

Dr. Joseph Mercola:

Well, we've got to first look at that. I'm sure you've heard the data where this Indiana life insurance company, in the third quarter, I think, it was a 40% increase over 2020, 40%.

Stephanie Seneff:

I saw that. That's the very beginning. We were slow to get the data. I'm eager to get the data on different causes of death-

Dr. Joseph Mercola:

They can't deny that. This is coming from, basically, independent businesses.

Stephanie Seneff:

[OneAmerica], I think it was, right?

Dr. Joseph Mercola:

Yeah, [OneAmerica], Indiana life insurance company, $100 billion company. This is going to be bad news for a life insurance company when you have-

Stephanie Seneff:

I know. I was thinking, they're going to really be hit hard.

Dr. Joseph Mercola:

They may even put in exclusion causes if you've gotten the vax.

Stephanie Seneff:

That would be interesting, wouldn't it? You would have to pay a lot more.

Dr. Joseph Mercola:

I don't even know if they can do it, if it's legal? But otherwise, they'll go out of business. Who knows what's going to happen? It'll be interesting to see.

Stephanie Seneff:

It's going to be very interesting to see. What worries me is that I think there's going to be long-term effects.

Dr. Joseph Mercola:

They've gone the other way, I think you may realize that, for those who die from COVID, who've not been vaxxed, they're not giving them the death benefit.

Stephanie Seneff:

Oh my, that's really sad.

Dr. Joseph Mercola:

There's a number of companies who pull that trick.

Stephanie Seneff:

Woah. Wow. You would think the life insurance companies would want people to stay alive because they're going to have to pay out big time if someone dies prematurely, right?

Dr. Joseph Mercola:

Yeah. That could be a powerful statement, because there's no law that can prevent them from doing that, if they said, "Listen, if you've gotten the jab and you die from it, we're not going to give your life insurance-

Stephanie Seneff:

Right.

Dr. Joseph Mercola:

That would destroy them. My guess is, that the truth will come out. You can't suppress it forever, they're trying to, but they won't be successful. Once it comes out, I think it's going to be a great thing because then the trust of the whole system, because it's not just this COVID injection, it's the whole system. We've been doing the thing for decades. We've been blowing the whistle on this thing. Because the numbers were so small and the number of people who have been impacted were so few and far between, that no one would listen. But now it's affecting almost everyone. You can't get away from this thing. You can't get away from it. I think the game's going to be over. That's my best guess.

Stephanie Seneff:

I sure hope you're right. It certainly seems to me like that's what should happen. There's so much evidence now that I don't understand why. I keep saying, I don't understand why everybody doesn't see it.

Dr. Joseph Mercola:

But that's what's so beautiful about you, you've got this curiosity component that's just beautiful. Because it drives you to understand. But the fundamental issue is just, you're curious. You're like a child.

Stephanie Seneff:

That is true.

Dr. Joseph Mercola:

You have not grown up and don't ever grow up because that's what drives you. I'm also curious and I'm curious of what your thoughts are, in respect to biological mechanism. It's pretty clear, although I haven't seen any statistics on these stuff, but you see all the reports of these professional athletes who are dropping like flies. These people, these individuals are typically late teens to 20s, incredibly fit, and probably the healthiest they're going to be their entire life.

Dr. Joseph Mercola:

You wouldn't predict that these types of individuals would succumb to a serious problem because they've optimized their biology. Unlike, most people, 42% of the population is obese and these people are not obese. You can't be a professional athlete and be obese. They're very healthy, ostensibly. I'm sure most of them are not eating an optimal diet, but they're eating better than most.

Dr. Joseph Mercola:

It seems, what catalyzes it, in the sports that they're really cause them to push themselves to highly exertion levels like in soccer or football, which they call in Europe, this is what's triggering it. It's this massive – this is obviously in people who've gotten the jab. They're dropping, they're having myocarditis, they're having all these infections and deaths, and I'm wondering, what do you think is going on there? Why is it in this subpopulation of incredibly fit athletes who are pushing themselves to extremes?

Stephanie Seneff:

I wonder if being fit causes system to have a lot more ACE2 receptors in the heart. I don't know if that might be true.

Dr. Joseph Mercola:

Interesting. There's a – I wouldn't have guessed that one. That's a good one.

Stephanie Seneff:

Because it is the ACE2 receptor. It's quite interesting how that works, because actually the spike protein of the SARS-CoV-2 is unique in having this furin – you know about the furin cleavage site right? That cuts it in half and you get S1 and S2. S1 breaks off, and S1 has this receptor that binds to the ACE2 receptor. It has this sequence binding domain for the ACE2 receptor.

Stephanie Seneff:

I actually suspect it's going to the heart via these exosomes, because the vagus nerve has a good track to the heart and you're pouring all these spike proteins, and this miR-155, which is associated with heart problems is probably packaged up, as it has been seen with the disease, that that's packaged up inside those exosomes. On top of that, that spike protein that's getting broken off, the S1, binds the ACE2 receptors and disables them.

Stephanie Seneff:

There's actually a paper about that, that I read that explains that whole process. That when S1 binds the ACE2 receptor, it disables it. When you disable ACE2, you get an increased ACE, which is what causes the high blood pressure and causes this – what is it? Shoot, the angiotensin II, right? Angiotensin II gets over expressed, and that gives you a very intense response in the heart. It gives you an inflammation. Of course, the myocarditis, the whole thing can happen in the response to all of that. The combination of the micro RNA and the S1 binding to the ACE2 receptor causing this imbalance.

Dr. Joseph Mercola:

But there's got to be another variable there. I could accept the fact that they could have an upregulated ACE2 receptor and the numbers of them in the heart.

Stephanie Seneff:

Maybe just the extreme exercise brings the heart to a point of over challenge, in a situation where it can't handle the excess load.

Dr. Joseph Mercola:

Just to drop, and they seem to drop during play. It's not like they're dying at home at night, they're doing it under severe cardiac stress.

Stephanie Seneff:

Too much load on a sick heart, a heart that's being inflamed-

Dr. Joseph Mercola:

Damaged, inflamed, and it's just pushing it.

Stephanie Seneff:

Yes.

Dr. Joseph Mercola:

I hadn't considered the fact that the ACE2 could be upregulated in the heart. That makes a lot of sense.

Stephanie Seneff:

Yeah, we should check that. I'm not sure that [crosstalk 01:05:28], but it might be.

Dr. Joseph Mercola:

Yeah. Well, someone knows it. Not many people would have studied that, but I'm sure it's a known fact. I'm sure it's been looked at.

Stephanie Seneff:

It is interesting, these young athletes. These people are the picture of health, and so strong.

Dr. Joseph Mercola:

Exactly the population you would not expect to have that type of response. That would be the one that should be immune to it. As puzzles go, once you figure the puzzle out. You've got another picture and you can, basically reverse engineer it to make the thing safer, the whole process safer.

Stephanie Seneff:

Exactly. Right. It's a fun game to play. At least these vaccines are keeping me well-employed. I'm very engaged in my work right now. It's just-

Dr. Joseph Mercola:

If all these ostensibly committed scientists who got the mainstream narrative are pushing it, were committed to truly finding the truth, we would have these answers in no time.

Stephanie Seneff:

I know. It's so frustrating. Isn't it?

Dr. Joseph Mercola:

It doesn't have to be this way. It doesn't have to be this way, but they're just making these poor choices. But anyway, it's a philosophical discussion and we're really talking about biological mechanism. It's so hard to avoid it, because it all ties into it. All right, are there other items you'd like to expand on from the paper? Because we've really only touched a small-

Stephanie Seneff:

I know, I'm trying to think what else was in there. Well, the G4s, those are really interesting. I just want to bring that up. That's something I didn't know anything about, and actually one of the authors in the paper was – we have four authors on the paper and the fourth author is Anthony.

Dr. Joseph Mercola:

The G4s, you mean the G-

Stephanie Seneff:

Quadruplexes.

Dr. Joseph Mercola:

Quadruplexes. I had to look that up, I never heard that before.

Stephanie Seneff:

They're so complicated.

Dr. Joseph Mercola:

Tell us what G-quadruplexes-

Stephanie Seneff:

Man, they're really fascinating, and I don't have a handle on them at all. I'm still struggling. I've got a bunch of papers that I don't even have time to read, and it's hard biology, even harder than a lot of the other stuff that I've been reading. Of course, people don't understand them either, so that makes them a tremendous mystery.

Stephanie Seneff:

G4s are basically an arrangement. Guanines are one of the four nucleotides that make up DNA or RNA, Guanine. Guanine is the G in the G4. What happens is that a sequence of nucleotides on a DNA or an RNA string can fold in on itself and form what's called these G-quadruplexes. It's four Guanines, at different places on the protein, winding back around and sticking together in this little-

Dr. Joseph Mercola:

Is this on the histones, or is it actually the nucleotides within a DNA strand?

Stephanie Seneff:

The nucleotides pinpoint that all by themselves, and there's usually a metal rod.

Dr. Joseph Mercola:

They're folding on each other?

Stephanie Seneff:

Yeah, there's a metal in the middle and it's often potassium or it could be calcium that helps to stabilize these G4s. The interesting thing about them is that they make the water around them structured. They make gelled water, which of course, for me, that made me light up. I was like, “Oh my God, gelled water,” because I'm always so interested in gelled water. Gerald Pollack’s work on the double helix.

Dr. Joseph Mercola:

EZ water.

Stephanie Seneff:

EZ water, right. Then those G4s can form. When they form, they typically – they can form in the DNA and that actually keeps it from becoming active. It doesn't get converted into RNA, and it doesn't make protein if it has those G4s.

Dr. Joseph Mercola:

Because it blocks the messenger or the-

Stephanie Seneff:

It probably creates easy water that doesn't allow anything to get close. It's like stuck in a gel. Think of it as being stuck in a gel. In the promoter region, there's a lot of G4s in the promoter

regions of these DNA sequences. Then there are lots of proteins that have these G4s in their promoter region, and there are proteins that can unravel them. It's really, really fascinating.

Stephanie Seneff:

There are proteins that can bind to them and cause the G4 to undo, and that activates, that allows the protein to be expressed. It's a regulatory element controlling which proteins get to be expressed from the DNA, which ones stay quiescent. Many of the proteins that have these G4s in their promoter are cancer oncogenes, connected to cancer. As long as they stay gelled, they're inactive, but if they become ungelled, they become active.

Stephanie Seneff:

It turns out that prion proteins, I found an amazing paper and we talked about that in our paper. I'm glad you let me think about what else we missed. There's a lovely paper about prion proteins that shows that they combined with their own, the protein gets made from the RNA and the RNA has these G4s. The protein can bind to the G4s in the RNA and both of them react.

Stephanie Seneff:

The theory was that the protein becomes prion-like. These prion proteins have two ways to be, one is safe and one is not safe, and the G4s increase the risk for the prion protein misfolding. The presence of those G4s, and the meeting with those G4s, increases the risk of misfolding in the prion-like configuration. The interesting thing about that is that spike protein is a prion-like protein. The RNA that they built for the spike protein, they did something called codon optimization, which involved putting a lot more Guanines into the RNA, than in the original one, they enhanced the Guanine.

Dr. Joseph Mercola:

That's right. You went over that the last time.

Stephanie Seneff:

Yeah, but I didn't realize at that time that enhancing the Guanine means increasing the number of G4s, which means increasing the risk of the spike protein misfolding into a prion-like protein. I think that the G4S increased the risk, the danger of spike as a prion-like protein.

Dr. Joseph Mercola:

Wow.

Stephanie Seneff:

We're working on this, and that's part of that paper. A lot of it is left hanging. A lot in that paper is like, “Well, the G4s can do this and that and the other, and there's implications if these things aren't quite right.” But we don't really quite know what will be the consequence of having all these G4 RNAs in the cytoplasm. We have massive numbers of these RNAs sitting there with their G4s, and what is that going to do to the rest of the G4 regulatory process? We do not know. Nobody knows, nobody has a clue.

Dr. Joseph Mercola:

Well, we need people like you to give us the clarion call and to shout the warning, to be alert for this possibility. Because if you understand biology, you can predict, with reasonable probability, some outcomes.

Stephanie Seneff:

Exactly.

Dr. Joseph Mercola:

Here is clearly one that needs to be watched for and screened for, and basically monitored.

Stephanie Seneff:

Our first paper that Greg and I wrote, we predicted that the vaccines would cause an increase emergence of variants of spike protein, altered versions of the virus, under the pressure of the vaccine. Indeed, that looks to me like that's what's happening with all these Delta and Omicron and all of that. But I'm really hopeful with Omicron, because Omicron looks like it's a milder virus, incredibly infectious. It'll flash fire through the population and give everybody essentially a vaccine. It's kind of like a natural vaccine, I think.

Dr. Joseph Mercola:

Yeah. It, to me, almost seems to be divinely created.

Stephanie Seneff:

I know, I agree.

Dr. Joseph Mercola:

As the answer to end this craziness. The way things are going, we're recording this in mid-January, it's very possible, this might be gone in a few months, this craziness, because everyone gets – this is more infectious than measles. Millions of people are getting it every day, which is great, because they're having a cold, and they're getting perfect natural immunity.

Stephanie Seneff:

Exactly. The study showed that it had immunity to Delta as well. Not as much as it would to the direct Omicron, but having had Omicron, you were protected, to some extent, from Delta. Delta's disappearing anyway, because Omicron is chasing it out. It's really great. I think Omicron is God's gift from Heaven.

Dr. Joseph Mercola:

That's my guess. I'm wondering, do you think the ability to generate an optimized immune response is going to be somewhat compromised if you've gotten the jab-

Stephanie Seneff:

That's what I'm thinking. That's what it looks like to me.

Dr. Joseph Mercola:

-if you get exposed to Omicron?

Stephanie Seneff:

Yeah. If you keep on getting jabs, every time you get one, I think it's going to set back your innate immunity another notch. Of course, you don't know how long that type-1 interferon suppression is going to go on. That's another thing. Everything is so unknown. It's very clear, it's happening.

Dr. Joseph Mercola:

That was the central point of your paper, is that you have this alpha interferon suppression as a result of getting the jab.

Stephanie Seneff:

Exactly.

Dr. Joseph Mercola:

So that when you're exposed to the divine gift of Omicron, where it says, literally, if you hadn't gotten the jab, it's going to give you permanent, perfect natural immunity.

Stephanie Seneff:

Right.

Dr. Joseph Mercola:

But you're not going get that gift if you've been jabbed.

Stephanie Seneff:

Exactly. That's what I think, the jab is going to interfere with your immune response to Omicron.

Dr. Joseph Mercola:

Which makes perfect sense. The primary mechanism is the impairment of alpha interferon response.

Stephanie Seneff:

I think so. Yes.

Dr. Joseph Mercola:

Which is important for the proper activation of the innate immune system.

Stephanie Seneff:

Exactly. That's right.

Dr. Joseph Mercola:

Or cellular immunity, as opposed to humoral immunity, mostly the T-cells and killer cells.

Stephanie Seneff:

When a cell gets infected with the virus is when it launches that response, the type-1 interferon.

Dr. Joseph Mercola:

Yeah. That is the aspect of the immune response that occurs very early on within the first few days, one to seven days.

Stephanie Seneff:

It allows the immune cells to come in and clear that cell and also remove all of those viruses that are in that cell.

Dr. Joseph Mercola:

What they're seeking to do with the jab is they're activating the humoral component, the antibody production, which takes longer. That's why they say you are not protected for a week or two. That's why they manipulate statistics that says, "You are not 'fully vaccinated' until two weeks after." That's because it wasn't any way, shape or form touching the innate immune system.

Stephanie Seneff:

Exactly. In fact, as I said, it actively suppresses it by virtue of not looking like a virus. What that type-1 interferon response responds to is the viral RNA, which is not present in the vaccine. It's a human RNA. It looks like a human RNA molecule. It doesn't trigger it at all. But worse than that, it actually actively suppresses it through those micro RNAs. It suppresses the ability to respond to anything with type-1 interferon.

Dr. Joseph Mercola:

Well, this is great. If you really want to go deep into this, we'll figure out some way, have access to this paper hopefully without impairing your ability to-

Stephanie Seneff:

Right.

Dr. Joseph Mercola:

We'll discuss that offline, but it's really an incredible read. Have you sent this paper to Dr. Malone yet, or was it your previous paper that he was-

Stephanie Seneff:

Not to Dr. Malone. No.

Dr. Joseph Mercola:

Okay.

Stephanie Seneff:
Dr. McCullough, of course is an awesome-

Dr. Joseph Mercola:
Yeah, of course. He needs to get a copy of this too.

Stephanie Seneff:
Maybe I should send it to him, huh?

Dr. Joseph Mercola:
Yeah. Do you have his contact information?

Stephanie Seneff:
I think so, yes.

Dr. Joseph Mercola:
Okay, good. I think that'd be good. He would love this. He really would love it, I'm sure. But anyway, if you have a passion for this, then this is something you're going to want to dive deep in, but I think we really outlined some of the fundamental summaries and abstracts from the concepts in the paper, but certainly feel free to dig into it. You're going to continue your work-

Stephanie Seneff:
Right. I'm going to keep on trying.

Dr. Joseph Mercola:
In the sunny climes of Hawaii.

Stephanie Seneff:
Right. Yes. It's a good life.

Dr. Joseph Mercola:
Where you can get optimal vitamin D year round.

Stephanie Seneff:
Read some newspapers all day long outside in the sunlight.

Dr. Joseph Mercola:
Yeah. Right. Outside, in the sunlight with minimal clothes on, or no clothes. But that's the key, at least around solar noon. I've been able to successfully implement that process here. This is like the 10th or 11th year without vitamin D. I just got my results back two days ago and it's the middle of January and it was at 61 with no vitamin D.

Stephanie Seneff:

Excellent.

Dr. Joseph Mercola:

That's where you want it, folks. Sixty-one is the low part of normal, which is probably okay. In January, it goes up to 80 or so in the summer, but that's a good way to do it. You'll be up there too. All right. Well, thanks for everything you're doing.

Stephanie Seneff:

Thank you for taking the time.

Dr. Joseph Mercola:

Keep up that great work.

Stephanie Seneff:

Thank you. You too, thank you for all you're doing. It's wonderful.

Dr. Joseph Mercola:

All right.