

SARS-CoV-2: A Possible Result of Laboratory Leaks

A Special Interview With Dr. Jonathan Latham

By Dr. Joseph Mercola

Dr. Mercola:

Welcome everyone, this is Dr. Mercola helping you take control of your health. And today we are joined by Dr. Jonathan Latham, who is a molecular biologist and a virologist which is a great skillset to help us understand how this virus that caused this national shutdown and put us in our homes and shut down the economy. How did it happen, what was the origin of it and we know what the conventional viewpoint is, but Dr. Latham has some really intriguing evidence to review to suggest exactly where this came from. So welcome and thank you for joining us today.

Jonathan Latham:

How are you there, Joe?

Dr. Mercola:

I'm doing great, doing good, getting really strong, no traveling so I've got a lot of time to commit to healthy behaviors, which is interesting because I've read a few studies that show the average American who is confined to their houses gained 5% of their body weight eating junk food. So you can go both ways, either way rather – you can choose the pernicious deadly food or choose food to get you healthy and engage in healthy behavior and actually come out of this thing stronger, which is what I chose to do.

Dr. Mercola:

So now you have an interesting history, we've interviewed you about four years ago for your work in virology as it relates to GMOs. And actually you had an academic position I believe over in the U.K. somewhere and then because of your strong opposition to GMOs, I believe you had to leave and you went to the United States where you are in Ithaca, New York now and serve as the editor of the Independent Science News. So maybe you can elaborate on that, your journey.

Jonathan Latham:

Yeah, we can talk a little bit, I mean I didn't have to leave but I did choose to. It became obvious that science was very much interfered with by commercial interest and if you wanted to do something that was in the public interest, that was going to be really hard. So I did the Ph.D. in England, the virology was in England and I could see that commercial interests were dominating the outcomes and then I moved to the U.S. and I was at the University of Wisconsin and I was doing medical research there.

Jonathan Latham:

And I can see the same thing, we would write on their grant proposals, they were doing this in the public interest, really we didn't believe the first line of their grant proposals. I can see that it was just there to just provide the basis or the justification for what we really wanted to do, which was play around in the lab and maybe for some people who were thinking about patents and stuff like that.

Dr. Mercola:

Yeah, it's a bit of a challenge and especially with the reality is that we need competent scientists to evaluate the truth and help us navigate these realities that we're confronted with. And so we need solid

scientists to do that and when they're conflicted with commercial conflict of interest it's a challenge and now you almost can't believe them.

Jonathan Latham:

Well it's very difficult to be an honest scientist these days, it's really, really hard [[crosstalk 00:03:35](#)].

Dr. Mercola:

Yeah, so that leads us into what we're going to discuss, the origins of the SARS-CoV-2 virus, the coronavirus which has mutated from the bats, at least that's the conventional media story and is zoonotically transmitted. However, there's another way to look at this and there's quite a bit of evidence coming out of this and the reason I mentioned that it's a good segue is because one of the primary researchers out of China at the Wuhan Institute of Virology was Shi Zhengli, I believe and she was responsible. While the papers are doing the initial research on this and used as a resource to, I guess, support the hypothesis and the thesis that this was zoonotically transmitted. So it's a story that she certainly commits to as to many other researchers who've been publishing on this for the last 10 years.

Dr. Mercola:

So why don't you walk us through your understanding of what happened, because it's really a beyond-fascinating story and when you put all the pieces together in an article that you recently wrote, which is certainly linked to, it makes perfect sense. And it's a pretty easy-to-read article, it's not complex or some previous articles on the origin that literally take an hour or two hours to read and go deep in the science, but yours really provides the framework of how to understand precisely what happened.

Jonathan Latham:

Yeah, I mean we didn't go too deep into the science because I don't think it's strictly necessary, because we don't know what the starting point was. Our article doesn't dispute that it came from a bat at some point, I think that is the strongest data but what we do dispute is the mechanism by which it came from the bat. So in our view, there are several different types of lab origin hypothesis, there is the simple one, the real simple one, is that these researchers from the Wuhan Institute of Virology or another virology BSL-2 lab that's down the road were basically going out to remote or remote-ish areas and collecting samples of bat swabs, bat poo and the blood sample from bats.

Jonathan Latham:

And they were then bringing them back to their lab and the very simplest possibility, is that one of them becomes infected in the process of doing that sampling. And we know that sometimes they didn't wear good protective gear, where there are stories about them being crapped on by bats, peed on by bats and so far and we know that they didn't always use the precautions and the other people warning us about the possibility of catching viruses from bats. And one of them came home, got a bat infection and then pass it on to one of their coworkers or to their family because they didn't quarantine properly or didn't even know that they're infected for example. So there's a simple hypothesis, another one-

Dr. Mercola:

Before we go to that one let's just expand on that a bit, because the challenge from my perspective with that hypothesis is that as far as we know the bat coronavirus does not have any affinity for ACE-2 receptors, which is really one of the reasons why this virus was so devastating.

Jonathan Latham:

Yeah. I don't think it's the most likely of the hypothesis, but I think that we should put it out there as being a possibility. And in that scenario, the virus would have to circulate among a bunch of people in order for the spike protein to evolve, to be suited to people, possibly unknown to them with maybe limited symptoms or be very transmissible in some way. So I understand your point and your point is good, that it doesn't automatically explain everything and we still don't know what the starting virus was either, but that's one possibility.

Jonathan Latham:

The other one is, they bought a similar virus back with them and they didn't really do a lot of molecular biology or recombinant biology on it, but they were just cloning it in a lab, they were trying to make an infectious clone, they were putting it into cells, maybe into monkey cells, maybe into humanized mice, maybe into human cells with an ACE-2 receptor expressed in them and then that virus which they didn't deliberately alter, then jumped into one of the researchers. So for example, there've been lab escapes of viruses in which people fail to decontaminate samples and then they give the samples to someone else or they throw them out with the trash or some mishap arises.

Jonathan Latham:

So the virus is either identical to the one that was collected from the wild or very little altered by the lab, but then it escapes because there's some failure in the lab, so that would be a second possibility. The third possibility is that they were collecting samples, we know they collected thousands of samples and many hundreds of bat sequences and that they were looking for ones that they wanted to alter and with interesting properties, they would get them good publications, scientific, interesting publications.

Jonathan Latham:

And so they found some with interesting spikes that maybe they could show bound to the ACE-2 receptor and they took those and they put them into either mix them with another sample that they have, or something that they already were working on in some other way. And through those recombination events maybe they knew, they wanted to see what happens when you add a furin site, but then also as you got pickle mixing and matching viruses and the whole remit of the lab, you have to understand is to show that viruses are potential pandemic pathogens.

Dr. Mercola:

Or triple P, PPP.

Jonathan Latham:

Yeah, people do call them PPPs. And the remit of the lab and you can see this on the grant proposals that they've written, they say, "Our thesis is that these viruses that we're collecting from the wild are potentially going to cause pandemics, and therefore our task is to see how many steps there are between them and a potential pandemic." And so for example, "We will swap spike proteins and see if the viruses that we have circulating in bats, really all they need to do is evolve better spike protein and all of a sudden they can become pandemic pathogens."

Jonathan Latham:

So you have to understand that's the motivation of the research and then the specifics are that they're swapping pieces of viruses, that they're collecting novel viruses that we may not have seen before or may have been unpublished and one of these turns out to be a very strongly active virus.

Dr. Mercola:

Okay, can I stop you there for a moment? I'm just curious and you'd be an excellent person to ask because of your experience in molecular biology and virology, how did they recombine this? What's the recombinant process? Because my suspicion is most of this work was done prior to the advent of CRISPR-Cas9, so what was the process that they employed?

Jonathan Latham:

I mean, there's a simple cutting and – the standard thing historically was you find a restriction site in two different viruses or you may manufacture a restriction site, so that gives you a cutting place in the genome. And then you take that, you'd cut a segment out of one virus and then you cut an equivalent section out with another virus and then you put that back in again to the – let's say you start with virus A and you cut a bit out and you put that into virus B, but of course you've got to remove the bit from virus B that it already has.

Jonathan Latham:

So you're basically swapping things and you're using restriction enzymes which are basically enzymes that cut DNA in specific places, that's kind of the old fashioned way. And then there are newer methods with PCR and so forth that is slightly more complicated, it means you're not restricted to restriction sites to do that. But basically there's very simple cutting and pasting but it doesn't necessarily leave a scar or a mark or whatever, this is the really important point here.

Dr. Mercola:

Okay, good, thank you.

Jonathan Latham:

The final, the final thing is that there are also passaging experiments. So passaging experiments are when you take a virus, say for example you take a virus that originally came from a bat and you put that into monkey cells or you put that into human cells or put that into micelles. What you normally observe with that virus is that it doesn't work too well in those cells because it's not adapted to them, it's a bat virus, it doesn't work too well.

Jonathan Latham:

But what virologists have learned to do is to essentially – as the viral infection is failing, you take a little sample of what is inside the cell and you put it into another cell and then when that infection builds up, but then basically the original cell starts to kill it off but you take another sample and this is called passaging. And what it does is it allows the virus to evolve into a more pathogenic form against the cells that you are now putting into. So you're always putting into the same species of cell or you can also do this with whole organisms.

Jonathan Latham:

So there's a famous experiment where a researcher put an influenza virus into ferrets and this is a virus from birds, and they put it into the ferrets and they eventually stuck it in their nose so it wouldn't fail to catch it, but this virus doesn't really affect the whole animal but it will exist in a few nasal cells for a short amount of time. But while it's existing there it's under severe selection pressure and so it's evolving to be more suitable to this ferret.

Jonathan Latham:

And then they basically stick swabs into the nose of the ferret, collect as much virus as they can and then they'd do the same thing into the next ferret. And after 10 generations, they had evolved the virus that was

actively infectious to the whole ferret and could infect a ferret in the next door cage, so that's called passaging. And so what's interesting about those kinds of experiments is that the research lab themselves, and as they go and sequence the new virus that they have caused to evolve, they don't know what it looks like.

Jonathan Latham:

It may have recombined, it may have mutated, it's something about it has changed. There's been a genetic change but you don't know what it is until you go and research it and clone it and make a new infectious clone. And so you have the possibility that what escaped from the lab is actually not probably known to the people in the lab, they don't actually know what it was that they evolved. And if they were doing those kinds of experiments, putting live bat viruses into cells of different species and historically we know that they weren't doing those kinds of experiments, then they could also develop a new virus.

Jonathan Latham:

And you can have a combination of those experiments so you can have researchers who passaged recombined molecules, so they did the cutting-and-pasting part and then they put back [the] cut-and-pasted virus into novel cells like human cells and then they passage that, and then you evolve an infectious clone in that way.

Dr. Mercola:

And in your article I think you mentioned that in 2017, literally three years ago, I believe it was Shi who did this, Zhengli, who infected HeLa cells with the coronavirus or the-

Jonathan Latham:

It was them.

Dr. Mercola:

Yeah, but these HeLa cells had an ability to express the ACE-2 receptor and then they passaged them in the monkey cells. And when you do this iteratively over time you can create a pretty potent pathogen, and is it your speculation that this is the entity that likely leaked from the lab if that theory is true?

Jonathan Latham:

Well it explains how for example, you can end up with a virus that has a very high affinity for human receptors, that kind of experiment. Because we still have to explain how a virus came from a bat with a presumably low affinity for human ACE-2 receptors and then wound up being able to infect large numbers of people in a short space of time. And we know that SARS-CoV-2 has very high affinity for human receptors. It was a feature of the early research on the virus like, "Wow, this thing has really high affinity to human receptors, well how could it have come by that?"

Jonathan Latham:

And one of the obvious answers to that question is that it was being passaged inside these human cells or that somebody cut and pasted a spike protein bound to these human receptors that they already knew worked particularly well. So my hypothesis is that either they were cutting and pasting or they were passaging or they were doing some combination of both, and then that basically led to somebody in the lab becoming infected through some kind of careless event.

Dr. Mercola:

So that needs to be combined with some leak from the lab and I'd like to explore that because you described some fascinating history that most people are unaware of. I believe the H1N1 virus is now extinct or at least was, and that was the one that caused the 1918 flu pandemic. But what most people don't know that in 1977, that there was a leak in a lab in either Russia or China where it got out and infected a large amount of people. In fact, it caused a global pandemic, and wasn't recently admitted being due to a lab leak and wasn't admitted to until recently they accepted that responsibility, and then it's actually, this one that became responsible for the subsequent swine flu pandemic that we have. Maybe go into that with more detail as an example of the leak that can occur from a lab that has actually occurred previously and cause pandemics.

Jonathan Latham:

Yeah, this is a real-life example so we think that there was a research lab in China or Russia that was basically unthawing the sample of H1N1 that have been in that freezer for 20 years since basically the virus went extinct. Because essentially what happened is the virus goes extinct and then a new version of the virus appears in 1977 in China where it was first spotted and it was identical to one that had existed 20 years before but very, very close, basically identical, one that had existed 20 years before and no one can explain how a virus could appear, which it was basically identical but had been somehow hidden.

Jonathan Latham:

There was a theory that had been in the permafrost and somebody had dug up a person from the permafrost and who had died with H1N1 flu, but that was the best theory that people had until they realized that it probably came from a lab that was making a vaccine. And for example, the early cases of the H1N1 flu were temperature-sensitive, they had a temperature-sensitive virus, and the temperature-sensitive virus is one of the things that you use when you're making vaccine, all right? So it was basically a partially disabled virus.

Jonathan Latham:

And basically it's agreed, I mean there are a few people who still are holdouts but basically there is no other explanation that this came from a lab and that there were labs who had stored stocks of it and so far, but no lab has really come forward and say, "It was us." So this has been kind of deduced from sequence information from the location in which it appear and so forth, but it's widely accepted by virologists. What's really interesting is it's part of a whole battle because there's a whole history of possible lab releases and lab accidents of human viruses and these are very contested events.

Jonathan Latham:

Because essentially what you're saying here is that a virus has leaked out from a lab and has killed people, has caused a lot of people to become sick and it may or may not have come from a virology lab, it sure looks like it quite likely did and there's a section of the virology community that is very uncomfortable with that admission. So we have this whole story, for example there's a story of HIV that it came from polio vaccination so this is a very contested thing.

Jonathan Latham:

There's another story of a lab outbreak from, well there's one in Venezuela, they had equine encephalitis which basically almost certainly escaped from a lab, there's also of course human disease and a pandemic, but there's also H1N1 swine flu. So there's a scientific paper by a friend of mine called Adrian Gibbs and his paper basically was written with two other virologists and he's a famous virologist, he says, "This came from a vaccine, the swine flu is actually not readily accountable by the circulation of viruses that happened in North American and European and South American pigs at that time."

Jonathan Latham:

Basically you can't explain it by that method, but you can explain it perfectly well by the idea that there was a manufacturer who was making bits of H1N1 from European sequences and North American sequences and South American sequences and stuck them all together to make a universal vaccine and somehow they failed to inactivate it.

Jonathan Latham:

And so they gave it to pigs in Mexico and that became the swine flu, the second H1N1 pandemic. And that second pandemic killed probably close to 300,000 people, so we have a whole series of examples of lab escapes of viruses. So when people treat the lab escape thesis as being somehow ridiculous or outrageous hypothesis or vastly improbable, to me it just demonstrates that ignorance of the history of virology.

Dr. Mercola:

Yeah. And along the lines you referenced the HIV coming from a vaccine and more specifically there was a book that was devoted to this whole concept called "The River: A Journey to the Source of HIV and AIDS" that discusses how – because it was believed and still by many believed, that HIV came from some apes, probably some African eating bushmeat or some chimpanzee or a monkey of some sort and that's the way they got it.

Dr. Mercola:

But there's evidence that they actually did experimental polio vaccines in these monkeys that were co-contaminated with SIV, Simian Immunodeficiency Virus which is a cousin to HIV. And then they cultured these cells to produce vaccines and that they believe seems to be a far more likely hypothesis is to how HIV got into the population, a similar nefarious strategy again related to vaccines. They're trying to help us, but they wind up causing more harm than good.

Jonathan Latham:

Yeah. Because these are people who are, as I would argue, in denial of the dangerous possibilities of vaccines because you have taken, I mean what happened in Africa was 10 years before HIV broke out, there were mass vaccination programs in Africa of oral polio. And these were attenuated vaccines, so basically they're live cell extracts that are being injected into millions of people and the geographic location of these outbreaks matches the early outbreaks of different varieties of AIDS, different strains of AIDS.

Jonathan Latham:

And there are four different species transmission events that are considered to have happened around that time and each one of them is basically, there've been no transmissions of SIV in the 2 million years history of human existence and then none since 1960 or so, right? And then there were four transmission events straight after these oral polio vaccination campaigns, which are huge things like millions and millions of people were stuck with needles taken from cells extracted from the wild, basically they're collecting wild monkeys using their kidney cells and so forth and then using those to generate vaccines.

Dr. Mercola:

Was that a similar technique of passaging that they use to produce the vaccine?

Jonathan Latham:

Well no, not to produce the vaccine necessarily but there's another suggestion that people have made that they were basically using dirty needles and they weren't keeping good records of who they injected and so forth, so people just come in and join the queue again because they've heard it's good for them. So this continuously using dirty needles and/or reinjecting the same people with new samples and taking part from old ones. So you've got the perfect conditions to create a vaccine-derived pathogenic event and you may know the story also, SV40. So this is the same, millions of Americans and many millions more probably around the world became infected with SV40 also as a result of recontamination event due to a vaccine.

Dr. Mercola:

That was all again with polio.

Jonathan Latham:

Yeah.

Dr. Mercola:

So you discussed the precedent of a global pandemic with the H1N1 virus nearly 50 years ago, but more contemporary we have the new part of the equations with these biosafety labs, they could come from 1 through 4 and the only BSL-4 lab interestingly in China is in Wuhan. And if you look at the demographics, I mean it's a big city but certainly China's a big country and you wouldn't anticipate that Wuhan would be the epicenter of this epidemic based on their demographics.

Dr. Mercola:

I mean it just doesn't make sense, I mean even Zhengli suggested it made no sense. So there's got to be other variables that factor to the equation that resulted in them being the epicenter and this could be one of them, having that lab there. So you talk about the U.S. embassy officials visiting them, the Wuhan Institute of Virology in 2018, and identified unbelievable breaches in the conduct that could lead to viral escapes, why don't you discuss some of those?

Jonathan Latham:

Yeah, I mean the U.S. embassy is claiming these things, I mean I think they're important data points but these are kind of spooks in state departments and this is a little bit of information that we haven't really seen all the relevant parts of, so we cite that. But we think it's more important that people from within China have raised questions about the biosecurity of this lab, I mean firstly it's newly open so that's automatically a little bit of a red flag. And then the second thing, it's the first one in the country and secondly, there were violations cited by the internal kind of overseeing agency in China of the kind of standards that they would expect from a BSL fallout.

Jonathan Latham:

So they've been trying to set up the certification systems and so forth for their labs because they're trying to set up a whole network, they want to set up a whole system of animal experiments and collection stations and so forth. The different kinds of labs and different kinds of viruses and different kinds of experiments, so this is a kind of a test project. So they're setting up the certification schemes and they've already been cited according to these reports for having these violations.

Jonathan Latham:

And then we have a series of scientific papers that have been written that basically say, could do better, you know what I mean? And it's difficult because these things are written in English by Chinese people

who are involved in the system and we're talking about an authoritarian communist country here. So "could do better" can be interpreted as the sternest warning they feel [they're] able to give, or it could simply be they think there are some marginal improvements around the edges that could be made to these systems.

Jonathan Latham:

So it's a little difficult to interpret that but the way that we see this is warnings from all different people and we see for example, evidence, visual evidence, for example, of people not wearing the right outfits. And security is a culture, biosecurity is like, "We don't take off our gloves in the middle of doing something else," because you have to develop procedures and habits so that you don't break them when something happens and it doesn't seem like that culture was in place.

Dr. Mercola:

That's a good point, I'm sorry to interrupt you. But most people listening to this don't really know what a BSL, Biosafety Level-4 lab is, there's only one in China, there's like three or four in the United States. So can you go in more details in the type of extraordinary precautions that need to be used regularly to prevent leak of the virus or whatever they're playing with?

Jonathan Latham:

I mean, to me the most interesting part about this is the BSL-4 labs, they can be designed technically to do all kinds of interesting things. The lab is on one floor and they have a sewage and sort of waste disposal system on the base and on the top they have filters for basically passing air. Because a lot of the security systems that people have are based on positive pressure and different air pressures and whatnot.

Jonathan Latham:

And these pressures are to stop you from being exposed because you're naturally handling these viruses, you're only a foot and a half away from them using your hands. And so you wear a special suit and the suit has a positive pressure and you've got all these kinds of technical things in place, so that is the main difference between that and a BSL-3 lab or BSL-2 lab.

Jonathan Latham:

So in the case of these BSL-2 or BSL-3 labs, you don't have all these necessarily high-tech parts to it, it's more like, "If somebody is going to disinfect something and they have a technician who's going to – they come along at the end of the experiment and disinfect the plate that you've been using. So those labs more rely on people's self-discipline and careful personal behavior.

Jonathan Latham:

But the BSL-4 labs, they're really strong in all this sort of technical stuff but they still are essentially plagued by a human error. This huge biosafety and expense of making these very expensive labs with the positive pressure and the special disposal systems, they still don't get away from the fact that most spills in these biosafety labs can be attributed to human error.

Dr. Mercola:

So just like anything in life, especially in professional sports you really have to pay attention to the fundamental basics. And if you violate or you're not engaged in these basics and there's a breakdown in them, the system is going to fail.

Jonathan Latham:

Yeah, that's basically right.

Dr. Mercola:

So now I guess-

Jonathan Latham:

And in the end, let me add something, what are those basics should be that you don't site these labs in the middle of a big city? So we already have what I would say a violation to the basics. They should be in a desert or something like that, they should be in Antarctica or something like that, remote areas is where they should be.

Dr. Mercola:

A potential solution for this would be to have the Chinese government cooperate and offer the laboratory data and an outside agency to come and review it, but the likelihood of that happening is pretty likely to never happen because they're not transparent about it. But it really wouldn't be the expensive process but if they can go in there and examine this, there would be the evidence to either prove or disprove that if those records weren't altered in some way.

Jonathan Latham:

Yeah. I mean in principle, these labs should have good lab notes. That's one of the principles of biosecurity, is that other people know what you're doing, that you have a strong record of what happens and it's clearly written down, what sample you're working on, what you did with it and so forth. So a whole kind of principle of biosecurity is that and another sort of related one is the transparency of the whole lab, I don't think people should be doing these experiments if they're not prepared to accept other people coming and visiting labs and auditing them in a sense.

Dr. Mercola:

That's great. I've interviewed Francis Boyle before and he's been involved with the biowarfare concerns for decades now and it's his belief that the only purpose of these BSL-3 and BSL-4 labs, really, is to engineer offensive biowarfare agents and I'm wondering what your views are, and do you think there is a legitimate research purpose there, or is it just a screen and a cover to essentially use these for offensive warfare agents?

Jonathan Latham:

I mean there are countries that have been doing that kind of research for sure, I mean the U.S. being one of them. But the main driver of all this if you asked me, is what we think of as the pandemic virus industrial complex, right? So basically you have to gauge foundation, which is pushing a model of public health, which is targeting diseases like either future diseases or actually existing diseases like polio and offering to eradicate these things as solutions to public health.

Jonathan Latham:

Because the alternative approach to public health is very traditional, it's like everybody washes their hands, everybody is well-nourished and everybody has a social network that they can rely on. We have competent nurses, we have competent doctors and everybody has PPE, maybe we have vaccinations. We have all these kinds of traditional things available. But the problem with these traditional things is that there are no profits into there, it's just like you're just producing rubber gloves, you're producing special boots for doctors to wear to stop them from becoming contaminated or whatever it is.

Jonathan Latham:

But you've got this kind of public health basics and there's a fight going on between the people who want those public health basics and the Gates high-tech approach, which is basically to do this pandemic surveillance like basically go out to remote bat caves, and as you point out, they have to go a long way away to get bats. This is one of the really interesting things is that the proponents of a natural zoonotic spillover want to basically argue that something happened in Wuhan that caused someone to catch a virus.

Jonathan Latham:

But the wet market has now been ruled out as a likely source by the Chinese and I think obviously I'm not party to all the data so I don't know, but they've said that and at the same time, you've got the centers of bats and the centers of coronaviruses are far from Wuhan. So that's an issue that the zoonotic people really need to explain and come up with a theory for how that happened, because at the moment they really don't have one.

Jonathan Latham:

And so the tradition, the sort of new idea being promoted by Gates is that you focus on these viruses, you catch viruses from all kinds of weird exotic species, and then you come to a lab like the Wuhan lab and you build this very expensive technological BSL-4 lab and you do these highly dangerous experiments to show that this virus or not that one could be the future pandemic. And then we can foresee that we'll need a vaccine to this virus and not that one and so on and so forth.

Jonathan Latham:

But this is like, Gates always got [inaudible 00:40:13], spending all his money in the north when he spoke claims that he's helping the southern countries, but basically these northern countries are basically corraling all this money out of Gates to do this kind of really high-tech research that is a substitute to genuine public health. So you got this kind of fight going on and these labs are at the center of that fight.

Dr. Mercola:

Yes, indeed. And the average person has a perception of Gates as being this altruistic benefactor to humanity who's philanthropically oriented and they failed to understand and recognize that the very recommendation he's advising for benefits him significantly and he's highly conflicted. They don't understand that since he started donating tens of billions of dollars, his net worth doubled, doubled, because he's violating basic laws that he's cleverly divided his philanthropic foundation with the trust and the trust is heavily invested in the very industries that he's promoting.

Dr. Mercola:

So he absolutely gains enormously financially from these investments that he's making and his returns are extraordinary, I mean he's not stupid, I mean he didn't get to be one of the richest men in the world for no good reason, I mean he's clever that way. But he's twisted the whole discussion to have people believe that he's doing this out of the goodness of his heart, when, [if] you carefully evaluate the facts, nothing could be further from the truth.

Jonathan Latham:

Yeah. I mean, you have to see him as part and parcel of the pharmaceutical industry-

Dr. Mercola:

Absolutely.

Jonathan Latham:

-and the vaccine industry and all these other groups. This really interesting thing happened the other day, the 77 Nobel laureates, most of them molecular biologists, wrote a letter to the president protesting the cutting of the grants to the Wuhan lab that were emanating from the NIH. Well the guy who's leading this effort by the Nobel Prize winners, I don't know if you picked up on this, there's a guy called Richard Roberts. And he's an English guy and he won a Nobel Prize, for introns in like the '70s or something, he's now an older guy.

Jonathan Latham:

But what is his scientific position? He is on the board of directors of New England Biolabs, which is like one of the biggest suppliers of molecular biology equipment. So they're corralling together, all these Nobel Prize winners to support all this molecular biology research that costs big bucks, right? Hundreds of millions of dollars a year to do this kind of research, all of it just money that could be going to PPE and so forth.

Dr. Mercola:

Or even more basic things like vitamin D-

Jonathan Latham:

Exactly, exactly.

Dr. Mercola:

-which builds up the immune system and prevents not only these diseases but radically lowers the risk for cancer and heart disease.

Jonathan Latham:

Yeah, that's good old-fashioned prevention, exactly.

Dr. Mercola:

Yeah, so it's just extraordinary. So do you have any other thoughts on the absurd ludicrousness of trying to absolutely circumventing all safety standards in developing this new vaccine that they intend to launch in the fall? I don't know that they'll be able to do it, but that's their intention, and I'm sure you have some thoughts on it because most people I've discussed this with, I mean it's just almost incomprehensible to believe it's not going to be a nightmare in side effects and complications and deaths.

Jonathan Latham:

Well, it takes time to test the vaccine.

Dr. Mercola:

They're not testing.

Jonathan Latham:

[crosstalk 00:44:02].

Dr. Mercola:

They're not testing, they're testing efficacy, they're not testing safety [crosstalk 00:44:08].

Jonathan Latham:

I mean, I really haven't looked into this, my head has been very much down into like, "What is really happening in terms of the causes?" It's kind of a full-time job to try to work out, because you know what? What we also plan to write about is there was a cover-up of the Wuhan lab.

Dr. Mercola:

Oh really? Can you go into more details?

Jonathan Latham:

Yeah, I can. So basically the nearest living ancestor of SARS-CoV-2 is a viral sequence that the Wuhan lab have had in there, according to them, their freezer for seven years and they've done nothing with [it]. This sequence came from a cave or a mine rather, where people who have been working had died of virus infections. So they had a strong reason to look into that virus sequence and that is the closest relative to COVID-19. And what happens is that (the pronunciation apparently is Shu) and Shi, what she does is they publish one of the very first viral sequences of this virus.

Jonathan Latham:

So like three papers come out in three days, all of it saying this is the sequence of the SARS-CoV-2 virus, they come out in Nature and couple other venues. And her paper makes no reference to this longstanding sequence that they'd had in her lab, zero reference. They instead, say they've taken a sample from that freezer and they've sequenced it, and they have [said], "This is the nearest living relative."

Jonathan Latham:

And when they've done that, of course, it is now the nearest living relative but it skews the fact that for seven years they'd had another virus which basically came from the same tube. They are the same, they have the same, actually the same thing. But it looks like when you go searching the DNA databases, it makes it look like this virus has just been with us since December, it really hasn't, it's been sitting in that lab supposedly un-researched.

Jonathan Latham:

So the question is, what were they doing with this viral sequence for seven years that may have killed three miners back in 2013? Obviously flanked up at the time as being of serious research interest and then they supposedly left it in the freezer and did nothing with it for seven years. [crosstalk 00:46:56] question.

Dr. Mercola:

How did you come up with that information? That is just fascinating.

Jonathan Latham:

We came across, there's a pre-print written by a doctor and his name is Dean [inaudible 00:47:10]. And so I read this pre-print and I thought, it's slightly eccentrically written but the basic premise of the thing is true and he's now improved the text or whatever so it's easier to understand. But it took me a couple of reads through to realize that he really had a serious point here, that the lab already had this sequence and instead of saying, instead basically they took a sample from the same tube and they sequenced the whole genome, so what they had from predating this pandemic was the smallest sequence.

Jonathan Latham:

So they sequenced the rest of the genome but instead of what a normal virologist would do is I would say, "We sequenced this sample, we now have the whole virus and it's called the old sequence name." The stuff from the tube from seven years ago, we published two papers on that by the way, and also uploaded to a database under the name BtCoV/4991. So it was already in the published literature, it's already in the databases, it's already being called as a probably sensible name but when they sequenced it and put it in their Nature paper, they've given it a new name.

Jonathan Latham:

And giving it a new name basically obscures the old history and they don't even acknowledge that it came from the same tube, which they now have been forced to acknowledge, that it came from the same tube and it's the same virus, the sequence identity between the two is 100%. So if they were one base pair different you could maybe make a scientific argument that we should give them a different name, but there's no different between them whatsoever. It's the same virus from the same tube collected from the same place, the mine where the miners died. So seemingly, according to medical reports, from a viral infection of pneumonia.

Dr. Mercola:

So that is just incredible because it leads to an enormous amount of evidence supporting the thesis that says it was leaked from the lab because it's been around for seven years, seven years, it just didn't appear spontaneously. So I mean, this information has got to get out, I mean this is solid evidence and it's published literature.

Jonathan Latham:

Well the 100% identity, I mean it is and it isn't, they've done their best to obscure this. So there are three papers that came out, with the three papers within three days that came out are really very interesting because you've got Shi's paper which basically pretends that this 4991 sequence never existed. They've forgotten all about it, that would be the interpretation of reading their paper. Either they don't read their own papers or they've forgotten all about it, well they've done something really weird.

Jonathan Latham:

Then there's another paper that comes out and then it says, "4991 is the nearest living relative and it comes from the Wuhan Institute of Virology," so that's statement number two. The third sequence paper that comes out, basically it does this huge phylogenetic analysis of the virus, it's got a sequence, they do this very complicated phylogenetic analysis and failed to mention anywhere that the nearest living relative is 4991 and has already been sequenced and is held in the Wuhan lab.

Jonathan Latham:

So they look at all these different parts of the genome, they do the whole genome, they do every kind of analysis and they as far as I can say, deliberately overlooked the existence of this 4991. So you got two people trying to overlook it and one lab, probably the naïve lab just says, "Hey, look, this comes from Wuhan Institute of Virology."

Dr. Mercola:

What is the naïve lab? Is that based in China or US?

Jonathan Latham:

Yeah, that's in China, that's in China.

Dr. Mercola:

That is surprising because you think there would be a strong recommendation and that's probably the incorrect term for sure from this Chinese government to suppress that information. If you're not on board, you're not going to be around for a long time.

Jonathan Latham:

Yeah. I mean information flows in perfectly, we don't fully know what could have happened, it's possible to anticipate or I guess I had a few scenarios, there are all sorts of possibilities. There are lab rivalries, there's simple naivety, there is the central government not knowing the significance of this sequence, they may not know that. At that time we don't think that they were censoring the scientific information that was coming out and maybe they took them awhile to figure out that actually the Wuhan lab was a possible source. But what's really interesting is everybody who sequenced, there were a bunch of labs that sequenced the virus around the same time.

Dr. Mercola:

Which virus? The virus from the mine?

Jonathan Latham:

No, the SARS-CoV-2.

Dr. Mercola:

Okay.

Jonathan Latham:

Right, and we're talking about January and February, who sequenced, at the same time and some just put it in the database and some published a paper and other people know that have their own private sequences and never did anything with it. And they all would have searched in the database and come up with this 4991 sequence from the Shi lab, they all would have done that.

Jonathan Latham:

And what you got to imagine is they just get on the phone and they say they find the Wuhan Institute of Virology and say, "Oh, the virus has broken out in your town just down the road from you, walking distance and you are the keepers of the nearest known viral sequence. Have you had a lab accident?" You can imagine dozens of labs phoning them up and say, "How do you handle a lab accident?" And phoning all kinds of people in the Chinese government and saying, "Look, probably they had a lab accident."

Dr. Mercola:

Yeah, so your impression is that those conversations most likely occurred.

Jonathan Latham:

Oh, they have to.

Dr. Mercola:

Yeah, wow. I've not seen this previously, are you the first one to uncover this in the United States?

Jonathan Latham:

Well, there are other people on parallel but slightly different tracks, I think, I mean I think bits of this is discussed but not all of that have to go there.

Dr. Mercola:

Yeah, to me that seems some of the most compelling evidence in support of it being leaked. I mean, do you have any other evidence you think is stronger other than the whole historical perspective we've reviewed?

Jonathan Latham:

What I'm offering is evidence of a cover-up and we don't know exactly what they were covering up. They could have been covering up something a little different, but the very obvious thing to be covering up is simply that you are researching a virus that looks uncomfortably like SARS-CoV-2.

Dr. Mercola:

And you're suggesting from the studies you review that they're basically identical SARS-CoV-2 and this virus isolated from the miners?

Jonathan Latham:

They are the closest living relative, so like-

Dr. Mercola:

Do they have the ACE-2 receptor, they got the-

Jonathan Latham:

We only have a partial sequence. For this, we don't have the whole genome of this original sample. They only provided a sequence of 370 base pairs but it is 98.7% identical that's on nucleotides in the 370 base pairs.

Dr. Mercola:

Yeah. And how many base pairs are there in the SARS-CoV-2? Is it like 23,000, 24,000?

Jonathan Latham:

The whole one is nearly 30,000.

Dr. Mercola:

30,000. Yeah, so that's like 1%.

Jonathan Latham:

Yeah. We're talking about the 1% level, but this is, you do have to qualify this a little bit. This is considered the most conserved part of the genome, so it doesn't necessarily extrapolate to the whole thing. What is quite possible is that, that sample comes from something that is way closer than anything we've been told about.

Dr. Mercola:

It's definitely an ancestor, it's definitely in a lineage and they could have done a research after that isolate to put gain-of-function research to make it even more dangerous.

Jonathan Latham:

Yeah, that's exactly the kind of thing that could have happened.

Dr. Mercola:

Yeah. So, gosh. So we talked about passaging and within reference to the ACE-2 receptors, but I believe this has an HIV envelope protein in there, which would be another one. And then there's speculation that the head of the Department of Chemistry from Harvard who was arrested and he's an expert in nanotechnology, which many believe was applied to this virus so it increases its transmissibility through the air.

Dr. Mercola:

Do you have any speculation as to how those characteristics got integrated into SARS-CoV-2?

Jonathan Latham:

Yeah. We have not looked into any HIV-like sequences, that's something we haven't done.

Dr. Mercola:

But they were there? They were there?

Jonathan Latham:

Yeah, that may be and we just have nothing novel to offer on that.

Dr. Mercola:

Yeah, I think it's Gp141, which should increase the transmissibility, which suggests a gain-of-function research. I mean, how's this going to get there? It doesn't get there spontaneously. Do you have any thoughts as a virologist how it got there?

Jonathan Latham:

No, I really wouldn't like to say, I mean, it was just speculation.

Dr. Mercola:

Okay. All right. So, wow, that was really interesting. Wasn't expecting that, that wasn't in your paper so it was good. So any other comments you'd like to share with us, your insights and your conclusions you've reached after investigating this?

Jonathan Latham:

Well, you know, I mean it's more, the big picture thing of, Do you really want to be spending public money?" Public money – all these different models of public health are being leveraged of. We talk about how it's Gates' money and whatever, but ultimately it's public money that's made then. I mean, much of that money is just Gates' tax breaks, and so the question is, "What do we spend our public health money on? Do we target these individual diseases and make New England Biolabs and the Bill & Melinda Gates Foundation investors rich? Or do we invest in public health in a sense that benefits everybody?" Like you say prevention and nutrition and also the big issue. The big issue, too, that we haven't really touched on is, "Why are we blaming the wildlife trade here?"

Jonathan Latham:

This is a really important question to ask because the wildlife – Peter Daszak, he's the head of the EcoHealth Alliance, he's been in all the media, he's been on Democracy Now!, The New York Times, the Scientific American, Science Magazine and all these different outlets.

Dr. Mercola:

60 Minutes, 60 Minutes.

Jonathan Latham:

Basically ubiquitous blaming the wildlife trade, saying categorically it's not a lab escape. Well, he is an interested party, right? His nonprofit is funding this research. The media cannot go and ask the person who's funding it, whether they came from their lab or not. It's ridiculous. But that's what they're doing and they're treating us like idiots, but the question is why is he blaming the wildlife trade, when many of these virus epidemic incidents originate and basically destroying rainforest, logging, building roads into these remote areas and so forth? And then people catch Ebola virus because their communities are disrupted and because animals are fleeing the destruction in the forest, right?

Jonathan Latham:

Now, it turns out that his EcoHealth Alliance is in partnership with the palm oil industry. So palm oil industry is part of the model to blame – basically they're supporting the EcoHealth Alliance to share an understanding of the origins of this pandemic, that basically whitewashes the destruction of the rainforest that many people believe is one of the important causes of all these. There are plenty of examples of damage to rainforest and rainforest communities, human and animal that have been resulted in virus spills and virus outbreaks from the wild.

Jonathan Latham:

There are a whole bunch of examples and they are not being talked about on CNN, they're not being talked about in many of these outlets. They're steering the story to this wildlife trade. Basically the little guys in all this and then reaping the benefits with all his grants from the NIH and so forth.

Dr. Mercola:

Yeah. Well, or maybe the industry that designed this, some people call it “plandemic” or “scamdemic” and engineered it to essentially produce a financial collapse. I mean, what they're doing in the economy is historical, it has never been done in the history of the world, inflate an economy of the wealthiest country in the world by so much, I mean it's unprecedented.

Dr. Mercola:

So yes, there's hundreds of millions of dollars, billions of dollars in case of Gates, but they're talking trillions and trillions of dollars that are literally displacing/destroying large segments of the economy, permanently changing it forever and shifting assets around to people who are very, very wealthy. So, it's easy to understand how some of these stories can be used as a cover to hide what's going on for the ultimate goal, what would appear to be in using this as a cover.

Jonathan Latham:

Well, people who speculate benefit from fluctuations. I wouldn't go so far as the “plandemic” and anything like that, but people who speculate, the Goldman Sachs of this world, the people whose money is in the stock exchange and so forth, they benefit from fluctuations in the market because they anticipate them and they have positions to defend themselves and they know that they can buy up stuff cheaply and so forth when the markets hit the bottom. So they've planned for all this stuff.

Dr. Mercola:

Well, basically it was a free market but it's been manipulated to hyperbolic standards with the federal government, and you can't do it without intervention from the governments. So if they didn't do that, then we'd have natural consequences then yeah, that would be a story but this has to do with government intervention, which suggests a much higher order of involvement, I guess.

Jonathan Latham:

Yeah. I mean, I'm very much interested in the politics of all this but I'm not a financial person, you know what I mean?

Dr. Mercola:

Yeah.

Jonathan Latham:

I'm the wrong person to ask.

Dr. Mercola:

I mean it has to be placed in the proper context, but one thing is the science and it's really important to focus on that to understand the origins. But then it's interesting to speculate as to why that may have occurred because I think probably one of the best ways to do that is observe the evidence, to look at what's happened and try to put the pieces of the puzzle together. And if you do, I think create a pretty cohesive theory.

Jonathan Latham:

I mean, we find, we do, you probably follow our website a little bit and we find that science. If you understand the science well enough, it really helps you to understand who's lying and what about the story they're telling. And so when you understand that part, you got a really strong anchor to base an analysis of what's really going on in the bigger picture. If you can see that a very obvious thing, the possibility here is a lab escape and then you've got, one or a few people wandering around the media saying, "A lab escape is an impossibility, it never happened, there's no chance of it at all." You know that they're not speaking science, that they have some kind of axe to grind and then you see who else repeats the message and who supports them and who doesn't and so forth.

Dr. Mercola:

Well, I think eventually it's all going to come out and I'm confident there are going to be efforts to shut these labs down, I believe 500 or 600 BSL-3 labs alone in United States, which is a relatively recent occurrence. I mean, we didn't have this many labs before. I mean, it doesn't seem to be any extensible reason to have that many labs and that type expose the country and the world to that type of potential threat from what appears to be almost inevitable escapes.

Jonathan Latham:

Well, escapes at some level probably are inevitable, and you've got naturally occurring pandemics, which have always happened but then you've got all this BSL-3 and BSL-4 lab research that is being directed towards predicting and preparing and so forth. But these people have not managed to predict anything so far. What they've done is done these incredibly dangerous experiments and then find out that the next virus comes from somewhere that they didn't anticipate or certainly didn't warn us about. And so it's really unclear what is really the research value. Marc Lipsitch has written really nice stuff about whether

this research, this basically hyper-reductionistic virological research that it will be caused by a particular spike on a particular virus and then a particular way about how much information that really generates, because if you did the same experiments on slightly different viruses you would get different answers.

Jonathan Latham:

And that's what ends up being the one that causes the pandemic. So this research is not really predictive but if enough virologists get together and say that, "This is how we predict the next pandemic, what is the government to do?" If that's what they all say, that's how we should do it, then who's going to contradict them? And this reductionistic [model] has caused huge amounts of money, tax payer dollars and so forth.

Jonathan Latham:

So you've got all these, I'm going to end up being incoherent here, but you got all these self-interested scientists saying, "We need to do more research," but it's really questionable as to whether their reductionistic model of predicting stuff and using these BSL-3 labs and so forth will ever deliver anything.

Dr. Mercola:

What do you believe is the incentive for that behavior? Is it just self-serving with respect to maintaining their current jobs?

Jonathan Latham:

Yeah, basically. Basically.

Dr. Mercola:

So which is not necessarily unethical behavior, I mean, you want to continue gainful employment, so why not push an agenda that's going to keep you employed? Even though it doesn't serve the public good necessarily.

Jonathan Latham:

Yeah. I mean, this is the problem with science today, right? Is that, you've got half a dozen different pathways that virology could take to prepare and prevent us from having these pandemics and what the path that ends up being taken is the one that's most profitable, or the people themselves but also all the satellite interests that exist. The vaccine people and the treatment people, and the reagent labs, and the chemical industry and so forth. So you got all this kind of constellation of interests that converges on a particular solution, which is not the solution with the most scientific or public health merit.

Dr. Mercola:

Well, lots of good things to think about. Any other comments you'd like to share with us?

Jonathan Latham:

Probably that will do.

Dr. Mercola:

It was good. I deeply appreciate taking your expertise and time and delving into this and uncovering this information that really lend some very scientific credible support to, I guess, debunk the proposed conventional media hypothesis that this was zoonotically transmitted just from bats alone and was not due

to a lab leak. I mean, the evidence just seems to be overwhelmingly against that, so you're maybe adding some of the few nails in the coffin to this one.

Dr. Mercola:

So I appreciate all your efforts and everything you do. So people want to know more about you, maybe you can tell us your website name, so people can go there, because you write articles on a regular basis.

Jonathan Latham:

Yeah. So we write at IndependentScienceNews.org and the nonprofit is the Bioscience Resource Project. And we'll do some more stuff on the virus for sure.

Dr. Mercola:

Okay. We'll maybe have you back again if you have some important breakthroughs like this, it's great. All right. Well, thanks for everything you're doing. Appreciate it.

Jonathan Latham:

Yeah. Well, thanks for asking.