Introduction and background of Dr. Jeff Wiegers.)

Somewhere now, artificial Somewhere now, artificial intelligence is studying your intelligence is studying your symptoms, symptoms, symptoms, interpreting tests, interpreting tests, and in some cases, providing clinical providing clinical recommendations. Previously, this required years of required years of medical training.

medical training. And here's the thing: And here's the thing: most patients most patients don't even don't even realize it's realize it's happening. Over 80 % of doctors are already % of doctors are already using AI in using AI in their practice.

their practice. Patients come Patients come to appointments already diagnosed through ChatGPT, and diagnosed through ChatGPT, and researchers researchers researchers use use use artificial intelligence to artificial intelligence to create peptides from create peptides from scratch—compounds that did scratch—compounds that did n’t exist before.

n’t exist before. Created by machines, Created by machines, they aim to they aim to improve human health improve human health and extend life and extend life. This is not a conversation. This is not a conversation about the future. This is about the future. This is happening right happening right now. And this raises now. And this raises some serious some serious questions. Who is questions. Who is responsible responsible responsible when AI makes mistakes? Is when AI makes mistakes? Is the doctor being replaced or the doctor being replaced or simply modernized?

simply modernized? And how to navigate a And how to navigate a system that is system that is being rebuilt in being rebuilt in real real real time? To help time? To help us understand us understand this, today I'm this, today I'm talking to Dr.

talking to Dr. Jeffrey Wiggers, a board- Jeffrey Wiggers, a board- certified certified certified anesthesiologist, anesthesiologist, interventional interventional pain specialist, who pain specialist, who trained at trained at Cedars-Sinai and works at the Cedars-Sinai and works at the forefront of forefront of forefront of regenerative regenerative regenerative medicine and medicine and advanced advanced advanced biotechnologies. Dr.

biotechnologies. Dr. Wagers, Wagers, Wagers, welcome to the show. Let welcome to the show. Let 's get down to business. Okay, buddy. Jeff, Okay, buddy. Jeff, welcome to the welcome to the show, man.

show, man. Thank you for inviting me. I'm Thank you for inviting me. I'm very happy to be here with very happy to be here with you. you. you. I am grateful. I appreciate it, I am grateful. I appreciate it, friend. I know, we friend. I know, we talked about this. I talked about this. I saw you in Cancun, I saw you in Cancun, I saw you in Vegas and I saw you in Vegas and I thought, "Dude, we thought, "Dude, we should record a should record a podcast," and then, in podcast," and then, in typical Greg typical Greg Jones fashion. I didn't Jones fashion. I didn't talk to you for talk to you for about six months, and about six months, and then I wrote: "Hey, I'm then I wrote: "Hey, I'm doing a podcast here, and I doing a podcast here, and I want to thank you for want to thank you for taking the time to do this."." You played " unavailable" and it unavailable" and it worked. So that's it worked. So that's it. This…this is my. This…this is my gift. I can do it.

gift. I can do it. This is how I do it. This is how I do it. Yes. Like "let's go out to Yes. Like "let's go out to lunch." Are you in lunch." Are you in California? This is a big California? This is a big deal. Let's go to deal. Let's go to lunch. Although we are going out lunch. Although we are going out for lunch.

for lunch. Exactly. Exactly. Exactly. This never This never happens, man. But happens, man. But for our listeners…

Dr. Wagers (I hope I'm I hope I'm pronouncing it correctly, pronouncing it correctly, because…). Ideally. Yes.

because…). Ideally. Yes. For those of you who are just For those of you who are just getting to know me, I getting to know me, I want a quick overview: want a quick overview: you come from you come from anesthesiology, anesthesiology, anesthesiology, interventional pain, interventional pain, and regenerative and regenerative medicine. This is an medicine. This is an atypical path for atypical path for medical medical school graduates. So, how did school graduates. So, how did you get to where you get to where you are now?

you are now? Yes, I went to Yes, I went to medical school wanting to medical school wanting to become a psychiatrist. become a psychiatrist. I really liked I really liked this idea. I think at the this idea. I think at the time it was time it was just about the brain, the way just about the brain, the way we looked at we looked at things—the brain was the things—the brain was the most interesting organ. It was like the place where consciousness seemed to be concentrated. So, I consciousness seemed to be concentrated. So, I was fascinated by that was fascinated by that aspect. And then it aspect. And then it turned out that turned out that practicing psychiatry practicing psychiatry was a little, well, was a little, well, disappointing. These disappointing. These were pharmaceutical were pharmaceutical prescriptions, and prescriptions, and not even necessarily the not even necessarily the medications that I medications that I thought cured the thought cured the problems. It was problems. It was more of a more of a symptom management thing, like symptom management thing, like SSRIs and SSRIs and benzodiazepines. So I benzodiazepines. So I was a little was a little disappointed in disappointed in psychiatry at that psychiatry at that point, and then I point, and then I turned my attention to turned my attention to anesthesiology, and the anesthesiology, and the drugs worked for these guys drugs worked for these guys. It was. It was so obvious when you so obvious when you watch watch watch someone go from a conscious someone go from a conscious state to falling asleep that I state to falling asleep that I could believe it. But could believe it. But then you get to then you get to surgery, and you know, there are surgery, and you know, there are great surgeries, there are great surgeries, there are surgeries that I believe in surgeries that I believe in less, and so that less, and so that pushed me into pushed me into pain management to pain management to find solutions for find solutions for pain and pain and spine problems. And from there, again, there spine problems. And from there, again, there were were were issues with issues with corticosteroids, corticosteroids, corticosteroids, devices, and things devices, and things that I just didn't that I just didn't believe in as much, and I believe in as much, and I think that was the think that was the approach of approach of approach of regenerative regenerative regenerative medicine—working medicine—working medicine—working with the body with the body using using using natural remedies. This is what natural remedies. This is what brought me to where brought me to where I am now.

I am now. Wow, that's really cool, Wow, that's really cool, dude. I mean, dude. I mean, and I like that too and I like that too,,, based on how based on how to use to use to use natural processes? How do natural processes? How do we get people we get people to get better and how do we to get better and how do we move away from, well, because move away from, well, because obviously, most obviously, most people, when they think people, when they think about pain relief, about pain relief, they think about steroids they think about steroids and medications, right? Not and medications, right? Not about how to make about how to make yourself feel better yourself feel better in the long in the long run. So that's run. So that's really cool that you really cool that you found this, Mark, that's found this, Mark, that's actually pretty actually pretty cool. Painful states are where people are where people end up when end up when they're already at a dead they're already at a dead end, right? Other end, right? Other specialists say: specialists say: we no longer know we no longer know what to do with the patient. They send them to a. They send them to a pain specialist, an pain specialist, an orthopedist: we've orthopedist: we've tried everything, go tried everything, go to a pain specialist, to a pain specialist, spine specialist or whoever spine specialist or whoever, many, many of them end up with of them end up with us. And many us. And many cases of pain, like fibromyalgia, are very fibromyalgia, are very mysterious. And I mysterious. And I liked the way liked the way these these these tasks were solved. And it also doesn't tasks were solved. And it also doesn't necessarily necessarily necessarily fit into the fit into the traditional medical traditional medical model, where it takes model, where it takes an hour or two to an hour or two to just dig into a person's medical history and try to person's medical history and try to solve a mystery.

solve a mystery. So something always So something always seemed seemed seemed strange to me about this, and strange to me about this, and now we're in a better now we're in a better position doing what we're doing.

we're doing. Good. Undoubtedly. We Good. Undoubtedly.

The role of AI in medicine.)

We discussed discussed discussed topics here, you know, and just topics here, you know, and just corresponded. You corresponded. You sent me a list sent me a list and I'm like, "Dude, and I'm like, "Dude, let's talk about let's talk about artificial intelligence," because artificial intelligence," because even in the last even in the last year when I started year when I started using ChatGPT, using ChatGPT, it was like Google. To it was like Google. To me, it's just me, it's just fancy Google. Like, fancy Google. Like, let me ask let me ask a question. And he gives a question. And he gives the answer. And now the answer. And now he does literally he does literally everything. And when we everything. And when we were texting, I were texting, I said, "Dude, I said, "Dude, I go to conferences all the time go to conferences all the time, and this, and this question comes up over question comes up over and over again, and someone and over again, and someone on stage always on stage always asks: Will asks: Will artificial intelligence replace us artificial intelligence replace us as doctors?" And now, this is as doctors?" And now, this is such a poignant moment.

such a poignant moment. This is our position. And we This is our position. And we know where it's all know where it's all going. This is just going. This is just madness. I saw madness. I saw this podcast. Maybe this podcast. Maybe it was Joe Rogan. There it was Joe Rogan. There was a guy there who was a guy there who said, "Right now, at the said, "Right now, at the stage we're at, you stage we're at, you can can can access Claude or access Claude or other models and have a world-class doctor, lawyer, or accountant at your fingertips." But world-class doctor, lawyer, or accountant at your fingertips." But for us as for us as clinicians, are we clinicians, are we already moving into the already moving into the past? Will we past? Will we be replaced?

be replaced? I saw it too. I saw it too. Actually, it was Actually, it was Marc Andreessen. Marc Andreessen. Yes. Yes. Yes. And he is Yes. Yes. Yes. And he is right. There right. There are so many are so many positive and positive and negative aspects to all of this.

negative aspects to all of this. I remember when I was I remember when I was doing anesthesia. doing anesthesia. The first thing I heard about AI was was was blood pressure monitoring, blood pressure monitoring, and we looked at it like and we looked at it like…you know,…you know, there's software in airplanes that allows the there's software in airplanes that allows the airplane to airplane to mostly fly mostly fly itself. That's how we itself. That's how we anesthesiologists looked at it anesthesiologists looked at it : he : he would give signals and would give signals and notify us, but for notify us, but for the most part we still the most part we still needed to be needed to be there as pilots. And it there as pilots. And it seemed like a distant seemed like a distant future, but I future, but I really think we're really think we're at that " hockey stick" stage now hockey stick" stage now where this technology is where this technology is taking off.

Just to set Just to set the context, I think there are the context, I think there are two views. There are two views. There are optimistic and optimistic and pessimistic pessimistic pessimistic views on AI.

Optimistic—we'll Optimistic—we'll just work with just work with it. He will be it. He will be there, but people there, but people will will will always be needed. And there is a always be needed. And there is a pessimistic view, which essentially says: no, we will become completely, we will become completely unnecessary. We wo unnecessary. We wo n't be there at all.

n't be there at all. The truth is usually somewhere in The truth is usually somewhere in the middle. Some the middle. Some jobs jobs jobs will likely be will likely be cut. There are things that cut. There are things that I think I think artificial intelligence can artificial intelligence can do better, and do better, and maybe these people maybe these people will find other will find other uses for them. But there are also places uses for them. But there are also places where we where we underestimate underestimate underestimate people's abilities, and we will people's abilities, and we will still still still play our play our part. Physical, part. Physical, emotional aspects— emotional aspects— I think AI I think AI will lag behind in this, and there will will lag behind in this, and there will remain certain remain certain needs that needs that only humans can satisfy only humans can satisfy. So, everything. So, everything is developing is developing is developing extremely quickly.

I think it's worth talking I think it's worth talking about the outlook for about the outlook for one, five, ten one, five, ten years, although at the years, although at the current pace it's almost almost impossible to look ahead ten years, but impossible to look ahead ten years, but we can make predictions for one to five years, and I would like to and I would like to discuss what we discuss what we see now.

Yes. My point is this: Yes. My point is this: when I think about when I think about AI replacing AI replacing doctors, it sounds doctors, it sounds about the same about the same as asking: will as asking: will GPS replace drivers?

GPS replace drivers? Let's look Let's look at another level, you're in at another level, you're in California, this is California, this is relevant here. Will relevant here. Will Waymo replace drivers? I Waymo replace drivers? I look at it the same look at it the same way: both GPS and Waymo can way: both GPS and Waymo can drive safer, drive safer, perhaps make fewer perhaps make fewer mistakes. But in the mistakes. But in the GPS analogy, someone is GPS analogy, someone is still in the car, and in the still in the car, and in the case of Waymo, someone is case of Waymo, someone is still sitting in still sitting in the control the control the control center, monitoring center, monitoring what is happening, what is happening, monitoring safety, and monitoring safety, and making decisions in making decisions in unforeseen unforeseen unforeseen situations. So I don't situations. So I don't think it's a replacement. I think it's a replacement. I think it's think it's a reinterpretation of the role.

I agree 100%, it's like I agree 100%, it's like the metaphor with the metaphor with anesthesiology and an anesthesiology and an airplane: someone is still airplane: someone is still sitting in the sitting in the pilot's seat and the system is giving pilot's seat and the system is giving us a warning, and us a warning, and this is definitely the first this is definitely the first iteration. That's how we're iteration. That's how we're putting it into putting it into practice right now practice right now : it's a kind of : it's a kind of assistant. But I see assistant. But I see this nuance: if this nuance: if I have patient data I have patient data and I enter it into AI, and and I enter it into AI, and I am the one communicating with I am the one communicating with artificial intelligence, I artificial intelligence, I usually get a usually get a better result.

Then we have Then we have patients patients patients who enter their own who enter their own data and show me what they get. And what they get. And with AI, there is a famous with AI, there is a famous saying: “garbage saying: “garbage in, garbage in, garbage out.” Not that this is out.” Not that this is exactly the case, but exactly the case, but if you don't ask if you don't ask him the right him the right questions, you can questions, you can end up in a somewhat end up in a somewhat strange situation where strange situation where he becomes overly he becomes overly positive and positive and sycophantic, sycophantic, sycophantic, endorsing everything endorsing everything you say and you say and just trying to just trying to please. But, uh, I please. But, uh, I still think there's a still think there's a significant discrepancy significant discrepancy because right now, at this because right now, at this point, a specialist in point, a specialist in this equation this equation is still necessary.

is still necessary. So let me embarrass you a little. embarrass you a little. Good. Well, actually, we Good.

AIu2019s impact on medical specialties.)

Well, actually, we were talking about a period of were talking about a period of one, three, five years — let's say five, five, five, let's stop there, let's stop there, because given the because given the pace of AI development, everything pace of AI development, everything will change. When you will change. When you think about medical think about medical specialties, which ones do specialties, which ones do you think you think could, I'm not saying could, I'm not saying disappear, but disappear, but change, right?

change, right? So, when I So, when I listen to listen to conversations and look at the conversations and look at the work work work being done, the three being done, the three specialties that are specialties that are mentioned most often mentioned most often are radiology, are radiology, pathology, and pathology, and dermatology, because in dermatology, because in radiology, AI is already radiology, AI is already reading these images.

reading these images. You know, that's the You know, that's the thing. So this is just what I hear in the I hear in the discussions. But in discussions. But in your opinion, what exactly your opinion, what exactly will change? I don't want to will change? I don't want to say "will disappear" because say "will disappear" because that's a bit of a bleak

that's a bit of a bleak way of thinking, but way of thinking, but what will change what will change the fastest?

the fastest? No, I think you… Actually, I think Actually, I think those assumptions are those assumptions are pretty valid. What, pretty valid. What, what is AI best at?

what is AI best at? Now he's Now he's incredible at working incredible at working with data. So, I with data. So, I mean, in our mean, in our clinic—for clinic—for clinic—for context, we run a context, we run a regenerative regenerative medicine clinic, and I would say medicine clinic, and I would say we work in we work in three areas: three areas: sports medicine, sports medicine, longevity, and also longevity, and also what we call what we call complex complex complex diseases—these are diseases—these are cases that cases that fall outside the scope of fall outside the scope of traditional medicine : : : mast cell activation syndrome, mast cell activation syndrome, Lyme disease, the Lyme disease, the microbiome, mold, and microbiome, mold, and so on. The reason so on. The reason they are complex they are complex is because it is a is because it is a huge clinical huge clinical picture involving picture involving many different many different organ systems organ systems that needs to be pieced that needs to be pieced together. So there are things in which together. So there are things in which he he he doesn't even come close to doesn't even come close to matching us, matching us, like sports like sports medicine. Physical medicine. Physical manipulations, injections —he doesn't even —he doesn't even compete in this yet. But compete in this yet. But when it comes to when it comes to ordering these ordering these large-scale large-scale large-scale laboratory laboratory laboratory tests, where we tests, where we get a huge get a huge amount of data, it can amount of data, it can create a create a clinical picture clinical picture that we are not really that we are not really capable of. Uh, so that's capable of. Uh, so that's quite an interesting quite an interesting direction in which it's direction in which it's useful at this useful at this particular moment.

But if I look But if I look at what it at what it threatens, it threatens, it threatens those things threatens those things that don't need a that don't need a human touch.

human touch. They don't need They don't need as much as much interaction with the physical interaction with the physical world. You just world. You just provide the data and provide the data and let it let it figure it out.

figure it out. Um, so I really Um, so I really think those days think those days are coming. And I are coming. And I think the sign is this: think the sign is this: if you control if you control AI, then the next AI, then the next step is likely step is likely to be to replace you. It all to be to replace you. It all starts with starts with the absence of AI, then the absence of AI, then AI control, and finally AI displacement. So AI displacement. So this is an early signal: this is an early signal: if it's encroaching on if it's encroaching on your field, we your field, we have to find a have to find a way to open up new way to open up new directions. I think there's an directions. I think there's an aspect of it that everything aspect of it that everything that AI threatens that AI threatens usually also usually also creates opportunities.

But my advice to such But my advice to such fields: find a fields: find a way to grow way to grow to remain to remain valuable. valuable. I saw another video that I saw another video that mentioned that… I forget who it was,… I forget who it was, dude. I'm so bad at dude. I'm so bad at remembering names.

remembering names. I should be I should be better at this. And that better at this. And that guy was talking about guy was talking about how if your how if your job is to job is to complete a task, complete a task, you're probably going you're probably going to lose that job, to lose that job, because that's what because that's what AI is best at—AI is best at— complete tasks, complete tasks, right? If you're just right? If you're just at the end of at the end of the spectrum, doing the spectrum, doing tasks and it's not tasks and it's not physical labor with physical labor with your hands, maybe…but your hands, maybe…but again, I say again, I say that because, like, an AI robot can't take robot can't take blood, but China already blood, but China already has these damn things that has these damn things that cut hair.

cut hair. They literally They literally do haircuts, do haircuts, use use use razors, everything according to the full razors, everything according to the full program. I'm like: we program. I'm like: we can do this. You can do this. You can probably draw can probably draw blood, right? It's blood, right? It's just a matter of just a matter of technique, right?

technique, right? But I do But I do n't really want to, n't really want to, even though it's kind of a even though it's kind of a task. task. task. You know what's You know what's crazy about this? When I crazy about this? When I was in college, was in college, if I had to if I had to bet on what I bet on what I thought was the thought was the thought was the safest safest safest career at the time, career at the time, it would be computer it would be computer engineering. Everyone said it was a rapidly developing technology, a high-paying, a high-paying job, computer job, computer science. We will science. We will need so need so many programmers. The many programmers. The irony is that the irony is that the first thing first thing AI threatens is computer AI threatens is computer science. These are the very people who created it. And so who created it. And so I was very I was very wrong about that.

wrong about that. If I had to If I had to make the same bet make the same bet in medicine right in medicine right now, I would bet on now, I would bet on surgeons. I would say surgeons. I would say these guys are the these guys are the safest, that's for safest, that's for sure. But given what sure. But given what you were talking about you were talking about with the haircuts, there are already with the haircuts, there are already trials underway, trials underway, for example, the Da Vinci robot for example, the Da Vinci robot or some of these or some of these robotic machines robotic machines that do that do operations on, say, the operations on, say, the gallbladder. And I thought this would be I thought this would be much later in much later in the development of AI, but it the development of AI, but it seems we're already seems we're already seeing early failures.

seeing early failures. Everything is leading up to this. It all comes down to Everything is leading up to this. It all comes down to, you know,, you know, and I think the person and I think the person who's doing the task, who's doing the task, if you're on the task- if you're on the task- doing end of the spectrum doing end of the spectrum, you're at the, you're at the most risk, but if you're the one who's, but if you're the one who's creating the task, creating the task, programming it, or programming it, or managing it, then you're managing it, then you're relatively safe, relatively safe, but you have to but you have to learn learn learn to use AI to use AI for that part.

for that part. Agree. Agree. Agree. That's right. And this, by the way, is a rather awkward rather awkward transition to what we transition to what we see here in the clinic.

see here in the clinic.

Patient empowerment through AI.)

Because, I think, Because, I think, studies studies studies show that about show that about 76% (if I look at the 76% (if I look at the studies I studies I will refer to, it's will refer to, it's about 76%) of patients have already have already uploaded their uploaded their tests to ChatGPT or tests to ChatGPT or another AI before visiting the doctor. They another AI before visiting the doctor. They have already entered their have already entered their results there; they results there; they viewed health content created by artificial created by artificial intelligence. They intelligence. They ask, "Give me the ask, "Give me the differential differential differential diagnosis, what is the diagnosis, what is the treatment plan, what are the treatment plan, what are the supplements?" He supplements?" He even releases brands, and people even releases brands, and people come to us come to us with that. So, it with that. So, it happens quickly.

happens quickly. Given what you Given what you see in Bio Reset, how does it see in Bio Reset, how does it change your change your work dynamics? Is this good? Is this work dynamics? Is this good? Is this bad? Is it a little bit of both bad? Is it a little bit of both?

? Personally, I Personally, I even even even like it now. Um, there like it now. Um, there are often are often some difficulties, but some difficulties, but at this time it at this time it usually doesn't catch usually doesn't catch me by surprise with me by surprise with something I didn't something I didn't know about. I mean, there's know about. I mean, there's some some some merit to Bio Reset in that; Many merit to Bio Reset in that; Many people in the people in the longevity field and in the longevity field and in the space where we space where we work have their work have their finger on the pulse of finger on the pulse of cutting-edge technology, we tend to think, we tend to think outside the box, just as AI often thinks—very AI often thinks—very broadly, encompassing broadly, encompassing different systems, and it's different systems, and it's often a holistic often a holistic approach. You went with approach. You went with me to some of these me to some of these conferences. There are very

conferences. There are very innovative people there who innovative people there who keep an eye on what keep an eye on what everyone else is doing. So everyone else is doing. So when my patients when my patients come in with come in with information from AI, I information from AI, I think it often think it often helps us move more quickly helps us move more quickly into a more into a more meaningful conversation meaningful conversation because they already because they already have the background knowledge.

Interestingly, I have been Interestingly, I have been outside the outside the traditional system traditional system in the private in the private medical sector for some time now. I medical sector for some time now. I see the situation here being see the situation here being a little different, and I think a little different, and I think some of these doctors some of these doctors might be a little might be a little more irritated, more irritated, because I know for a fact that because I know for a fact that they don't they don't prescribe supplements as often.

prescribe supplements as often. They probably don't They probably don't want to talk about want to talk about peptides because, peptides because, you know, they just you know, they just live normal live normal lives, spend time lives, spend time with their kids, do with their kids, do their own thing, and don't their own thing, and don't do all this do all this extra extra extra education. Like some of education. Like some of us crazy us crazy people. So I think there people. So I think there are some are some factors here: the more factors here: the more you follow you follow cutting-edge cutting-edge cutting-edge developments, the less developments, the less I think you worry about I think you worry about patients using AI.

Yeah, I agree with that too Yeah, I agree with that too, dude. And it, dude. And it 's interesting to look at 's interesting to look at some of the data here, like when some of the data here, like when I was preparing for I was preparing for our conversation. The AMA our conversation. The AMA published an article published an article in which the majority—there in which the majority—there were a bunch of patients there, were a bunch of patients there, I would say over 50% —expressed —expressed —expressed concerns about concerns about patients using AI to patients using AI to interpret interpret interpret complex results complex results without a doctor's supervision.

without a doctor's supervision. That is, you can't That is, you can't use AI use AI to diagnose cancer, to diagnose cancer, because it's a very complex because it's a very complex diagnosis, and I diagnosis, and I agree with that. But here's what's agree with that. But here's what's interesting: another paper came out interesting: another paper came out, a, a Stanford and Stanford and Harvard study, which Harvard study, which showed that AI showed that AI actually performs actually performs worse when it has to worse when it has to work work work with incomplete with incomplete information or information or revise decisions revise decisions on the fly. And these are our on the fly. And these are our real clinical real clinical cases, where you cases, where you think it's one thing, and think it's one thing, and then it turns out to be then it turns out to be this, and you learn this, and you learn about it in about it in real time.

real time. Yes. There is a very interesting Yes. There is a very interesting example. Before example. Before we even started, I was thinking we even started, I was thinking about presenting about presenting two scenarios: a two scenarios: a positive and a positive and a negative one regarding the negative one regarding the use of AI.

There is a condition There is a condition called called called craniocervical craniocervical craniocervical instability that instability that occurs in the cervical occurs in the cervical spine.

spine. spine. Some people may Some people may experience experience experience instability between the C1 instability between the C1 and C2 vertebrae, which can and C2 vertebrae, which can cause a range of cause a range of neurological neurological neurological symptoms and symptoms and headaches. And it headaches. And it has a whole spectrum of has a whole spectrum of manifestations, but manifestations, but it is it is very difficult to diagnose. This very difficult to diagnose. This requires many requires many specific specific specific diagnostic tests, and the breadth of symptoms is, and the breadth of symptoms is very wide. I very wide. I had many had many patients who read patients who read about it on the internet, about it on the internet, used AI, and used AI, and convinced themselves so much that convinced themselves so much that this was exactly what they had—craniocervical craniocervical craniocervical instability—that instability—that instability—that they started looking for they started looking for a specialist specifically for a specialist specifically for it. They are undergoing it. They are undergoing examination. They examination. They potentially get potentially get injured in the process, whether

injured in the process, whether through surgery or through surgery or through some through some treatment, like treatment, like physical therapy, that physical therapy, that might be too might be too intense or intense or something like that. But something like that. But what they don't what they don't think about is, is it the think about is, is it the microbiome? Is microbiome? Is this some kind of toxin? And I this some kind of toxin? And I think AI think AI is fixating on is fixating on this diagnosis, which this diagnosis, which only reinforces it.

For me, this is an example For me, this is an example of when I of when I had to had to had to talk people out of talk people out of it, because I've worked with it, because I've worked with these tests and I know the these tests and I know the criteria, and I've seen criteria, and I've seen a lot of a lot of misdiagnoses. On the other misdiagnoses. On the other hand, a positive hand, a positive use case : I, for example, know : I, for example, know that stem that stem cells are becoming a cells are becoming a super popular super popular super popular method in the field of method in the field of regenerative regenerative regenerative medicine. They became medicine. They became popular partly popular partly thanks to AI. There was a dead end in the stem cell field where was a dead end in the stem cell field where people said, "Oh, these are people said, "Oh, these are mesenchymal mesenchymal mesenchymal cells, they're cells, they're not really not really pluripotent, they pluripotent, they can't can't can't transform and transform and take root in the take root in the body." And body." And patients start patients start asking the AI, "Are there asking the AI, "Are there any pluripotent any pluripotent cells?" cells?" cells?" Marie Dava's research on mucosal cells was buried in was buried in the literature, and it was the literature, and it was thanks to AI and thanks to AI and human inquiry that they were human inquiry that they were rediscovered, realizing rediscovered, realizing that they had been that they had been underestimated all along. So I underestimated all along. So I think there's a think there's a positive aspect to it positive aspect to it that helps people, that helps people, say, with say, with mold toxins or things mold toxins or things that your regular that your regular doctor might not know about.

Now they Now they learn that this learn that this may be an option, may be an option, but at the same time they but at the same time they may get a may get a misdiagnosis—this misdiagnosis—this misdiagnosis—this leads to leads to overdiagnosis of overdiagnosis of overdiagnosis of certain problems.

Yes. And, man, I have to Yes. And, man, I have to say, I'm very say, I'm very supportive of a position supportive of a position that's not based on that's not based on fear, you know? I fear, you know? I say that people's access say that people's access to AI democratizes to AI democratizes medical information. There are no no restrictions here. Everything is restrictions here. Everything is literally before literally before your eyes. And I think that's your eyes. And I think that's important for the less important for the less affluent affluent affluent or people or people who don't have access who don't have access to doctors like to doctors like you or me, where they're you or me, where they're only given a short only given a short answer. I answer. I only had seven minutes only had seven minutes with the therapist. Something is with the therapist. Something is wrong here. I can wrong here. I can at least get a at least get a direction: "This might direction: "This might be it" or "Here's something else to look out for." And they can." And they can come to your clinic or come to your clinic or my clinic and my clinic and say, "Wait, I…something's wrong. I…something's wrong. I saw this, I saw this, I checked something in ChatGPT, can you help me?" I think that's help me?" I think that's very good, very good, right? So right? So empowerment is empowerment is great, and what you've great, and what you've been telling about your been telling about your story is amazing.

story is amazing. I think it's all about the I think it's all about the fuses, when fuses, when someone, let's say, someone, let's say, gets stuck: "I have gets stuck: "I have this, and the chat…" this, and the chat…" 100% sure that 100% sure that I have this, and I'm like: "No. " " " and it really and it really reinforces, yes, it reinforces, yes, it gives you this information. Oh, of course. I also. Oh, of course. I also have this symptom.

have this symptom. Fits perfectly. Fits perfectly. Often he continues to Often he continues to drive into this corner.

The future of AI in healthcare.)

And um, I think what you um, I think what you said about said about democratization is democratization is perfect, because we perfect, because we know one thing: there is already a know one thing: there is already a need for therapists, need for therapists, doctors, all over the doctors, all over the United States. And there United States. And there is even more need for truly high- truly high- level specialists and doctors. So, is there a place level

specialists and doctors. So, is there a place for AI? I think for AI? I think the answer is 100% yes. Are the answer is 100% yes. Are there any potential there any potential downsides? I think a downsides? I think a good example would good example would be a revolution, like the be a revolution, like the advent of the printing advent of the printing press. Before press. Before we could print we could print books, all information books, all information was kind of was kind of protected by certain individuals.

And then the printing And then the printing press allowed press allowed this information to be disseminated this information to be disseminated among the among the population. Could population. Could this have had any this have had any negative consequences?

negative consequences? Yes, of course. But Yes, of course. But at the same time, yes, I think we'll yes, I think we'll see that there see that there will be downsides, but if we will be downsides, but if we move in the move in the right direction, no one is going to right direction, no one is going to say that we shouldn't have say that we shouldn't have created the created the printing press, printing press, right? So, I think right? So, I think if we manage it right if we manage it right, it's a, it's a great thing.

great thing. Yes. So, that's it Yes. So, that's it, dude. Just kind of the, dude. Just kind of the pros and pros and cons of it. And I'll cons of it. And I'll summarize this part a little bit summarize this part a little bit, dude. In, dude. In my opinion, it's as my opinion, it's as simple as possible. It's like simple as possible. It's like a calculator, right?

a calculator, right? Using AI for Using AI for our health. It's like our health. It's like using using using a calculator for a calculator for finances, dude. He finances, dude. He can count faster can count faster than any living than any living person, right? He person, right? He will give a number faster will give a number faster than any of us.

than any of us. Fewer errors, but Fewer errors, but it really can't it really can't tell if buying a tell if buying a house now is a good house now is a good idea idea idea for your life. He for your life. He might say, “Hey, might say, “Hey, the market is like this,” but he the market is like this,” but he doesn’t know your doesn’t know your finances, right? He doesn't finances, right? He doesn't know your nuances.

know your nuances. Doesn't know all these Doesn't know all these things. And I think this things. And I think this is is is indispensable for indispensable for many industries at this time.

many industries at this time. So, I think that's the So, I think that's the downside. He doesn't know the downside. He doesn't know the whole story, and if whole story, and if you don't tell it, you don't tell it, he won't know it, and.

he won't know it, and. Of course, patients Of course, patients can also sit and not can also sit and not tell us tell us everything, but we have… everything, but we have…

we have a history of we have a history of relationships with these relationships with these patients. We have, patients. We have, you know, especially if you know, especially if you've been working with them you've been working with them for a long time, some knowledge for a long time, some knowledge about their family about their family history that history that helps us make the helps us make the right decision.

right decision. So I think there So I think there needs to be a balance here, needs to be a balance here, man, and we just man, and we just have to… I think it's like have to… I think it's like this: we shouldn't be this: we shouldn't be afraid of it. You cannot afraid of it. You cannot stop the flow of time; stop the flow of time; you will not call off the dogs of you will not call off the dogs of war. This [__] war. This [__] is coming, isn't is coming, isn't it? But we must it? But we must know how to use know how to use it, implement it, implement it, be careful, it, be careful, and act wisely.

and act wisely. That's what it all That's what it all comes down to. I, comes down to. I, for example, try for example, try to learn as much as possible to learn as much as possible. I'm trying. I'm trying to learn new things. Dude, I understand. Choosing, I understand. Choosing supplements can be supplements can be confusing.

confusing. confusing. There are hundreds of There are hundreds of brands. There are brands. There are conflicting

claims, and conflicting claims, and it's impossible to know it's impossible to know what's actually good and what's actually good and what will truly make a difference in what will truly make a difference in your health.

your health. That's why I created Dr. Jones Supplement Store. Every Dr. Jones Supplement Store. Every product in the store— product in the store— for energy, for energy, gut health, sleep, gut health, sleep, hormonal hormonal hormonal optimization, optimization, optimization, recovery, and more—is personally reviewed, tested, and, tested, and recommended. These are the recommended. These are the formulas that I formulas that I use myself and use myself and recommend to my recommend to my patients, friends, and patients, friends, and family. So go family. So go to drjonesseupplements.com, to drjonesseupplements.com, sign up for our sign up for our mailing list, and you'll mailing list, and you'll get 10% off your get 10% off your first order. You will first order. You will also receive also receive exclusive exclusive exclusive protocols and tips protocols and tips that I share only that I share only with my community. Let's with my community. Let's cut through the noise cut through the noise and choose what and choose what really works.

really works. I think everyone is I think everyone is responsible for responsible for themselves, because if you themselves, because if you just sit around and just sit around and do what you've do what you've always done, you can always done, you can stay on the stay on the sidelines of history, sidelines of history, no matter what. I think no matter what. I think everyone needs to everyone needs to think about how think about how to develop new to develop new industries with industries with this technology, and we this technology, and we have, as you said, have, as you said, — I don't think we — I don't think we can stop it, but can stop it, but we can change we can change our approach from the our approach from the fear of fear of it coming. I it coming. I hope it doesn't hope it doesn't affect me, you know, I hope it, I hope it affects someone affects someone else before it affects else before it affects me. I think we should me. I think we should think about how to think about how to adapt our adapt our work, because if we work, because if we create new create new sectors, yes, it sectors, yes, it displaces some displaces some people, but we can people, but we can easily move them into easily move them into these new areas, whether it's these new areas, whether it's developing developing developing robotic robotic robotic operations or new operations or new methodologies. I methodologies. I mean, what could we mean, what could we do with these new do with these new capabilities, capabilities, capabilities, instead of instead of just whining about just whining about robots coming, robots coming, taking over everything, or taking over everything, or whatever.

whatever. whatever. This is true. This is true. This is true. This is true.

AI in clinical practice: opportunities and challenges.)

So let's So let's get down to the facts, get down to the facts, since we already since we already know where we know where we are. I saw are. I saw another study another study where it was, I think, 70%, where it was, I think, 70%, maybe over 80%—I'm "fine" with the numbers now. Um, "fine" with the numbers now. Um, reports are that reports are that doctors are saying they're doctors are saying they're using AI in using AI in some form or another, some form or another, right? So, eight out of right? So, eight out of ten doctors ten doctors say, "Yes, I say, "Yes, I use AI somewhere in use AI somewhere in my practice." my practice." Truth? And this number is Truth? And this number is twice as high as it twice as high as it was three years ago.

was three years ago. But what does But what does AI actually look like in your AI actually look like in your practice? How does it practice? How does it help you and what do help you and what do you think it you think it lacks?

lacks? lacks? True. What it's True. What it's particularly particularly particularly good for us right now is that good for us right now is that if you're if you're working in working in functional or functional or preventive preventive preventive medicine, medicine, medicine, lab panels lab panels are becoming much more are becoming much more sophisticated and sophisticated and meaningful. Which is meaningful. Which is great. We get a great. We get a ton of data, but ton of data, but frankly, it's frankly, it's a little overwhelming.

You have a You have a B12 abnormality, a high B12 abnormality, a high level of C-reactive level of C-reactive protein combined with a protein combined with a certain gene, and an certain gene, and an excess of E.

excess of E. coli—it's difficult to put together a coli—it's difficult to put together a holistic holistic holistic clinical picture

from this clinical picture from this. AI is already. AI is already better than us at this — to be honest — and it's — to be honest — and it's very convenient to very convenient to upload all these upload all these analyses into the system analyses into the system so that it can turn so that it can turn them into a certain narrative, them into a certain narrative, even if it's not 100% accurate.

He's not always He's not always perfect, and I think perfect, and I think treatment plans are treatment plans are where he can where he can fit in, but he's fit in, but he's good at putting things together good at putting things together and and and creating the big creating the big picture. There are things that picture. There are things that still surprise me still surprise me every day when he says, every day when he says, "Of course, this indicator "Of course, this indicator is rejected because a certain is rejected because a certain type of microbiota is a type of microbiota is a cofactor for this cofactor for this specific specific specific enzyme." It enzyme." It connects all of this—it's the connects all of this—it's the most useful feature right most useful feature right now when working with now when working with large large large data sets.

Oh my God. Yes, it already exists. And Oh my God. Yes, it already exists. And I guess one more I guess one more question: do question: do you you you already use any already use any transcription services for transcription services for documentation?

documentation? documentation? Yes. Yes. A. Yes. Yes. A. Yes. Of course. Yes. Of course. Excellent comment. Excellent comment. Yes. Yes. Yes. Oh man. I can't Oh man. I can't rely on it rely on it blindly, but it blindly, but it saves me an saves me an hour to an hour and a half a hour to an hour and a half a day because now I day because now I can just can just look it up. This look it up. This works in the background works in the background, although it constantly, although it constantly gets the words wrong.

gets the words wrong. Dude, I think Dude, I think I was I was telling telling telling one of my one of my friends about this to a patient. I was talking about friends about this to a patient. I was talking about retatrutid, and I somehow retatrutid, and I somehow called it retat. I'm called it retat. I'm like, "You know what? We like, "You know what? We have to stop have to stop right now." This is where right now." This is where I draw the line. Like, I draw the line. Like, you're putting me in a you're putting me in a bad light. Yes.

bad light. Yes. This can't be, I This can't be, I think it's like C max. It think it's like C max. It was like C max, like CWalk. I'm was like C max, like CWalk. I'm like, "This is ridiculous.

like, "This is ridiculous. This is just crazy. This is just crazy. I can't I can't let this happen, right?" And let this happen, right?" And you know, those are the things, you know, those are the things, man. But you seem to have hit the nail on the head man. But you seem to have hit the nail on the head,,, man. It's good for man. It's good for taking all this taking all this complex data and complex data and saying, "How do I saying, "How do I make sense of this?" make sense of this?" But I think the important thing is, you But I think the important thing is, you know, I know, I built the cloud, that's built the cloud, that's my topic, man. And I my topic, man. And I created a model there, created a model there, like a project to like a project to help with GI cards, help with GI cards, right? And I kind of invested in right? And I kind of invested in it, it, it, but I had to but I had to fill it up. I didn't fill it up. I didn't just say " interpret my GI charts." I said, here are charts." I said, here are my GI cards. Here is my my GI cards. Here is my report that I created report that I created for patients. Here is for patients. Here is my interpretation.

my interpretation. Here is the training Here is the training documentation. And so documentation. And so I can I can upload it there. And I upload it there. And I test it to see if test it to see if it gives the same answers as I would. That's as I would. That's pretty close. There are a pretty close. There are a few things few things she misses. I'm she misses. I'm like: I probably wouldn't like: I probably wouldn't do it do it based on the based on the patient's history, or she patient's history, or she might not know about might not know about certain things that we certain things that we use, like use, like larazid or BPC 157. She larazid or BPC 157. She could be wrong here.

could be wrong here. But it really But it really helps speed up the helps speed up the process. But I think the process. But I think the important thing is that we important thing is that we still have to still have to do the testing to be sure —you can't just —you can't just blindly say, here, blindly say, here, take this.

take this. You are 100% right. It's You are 100% right. It's like the birth of an like the birth of an all-in-one doctor. Because if you think about Because if you think about medicine, there's a reason why there medicine, there's a reason why there are are are cardiologists, hepatologists, cardiologists, hepatologists, and nephrologists. And all and nephrologists. And all you can you can handle as a human handle as a human is one is one organ system, and then, organ system, and then, even more, there's the even more, there's the cardiologist- cardiologist-electrophysiologist. That's electrophysiologist. That's how much we've how much we've atomized medicine atomized medicine because of how because of how detailed it's become.

detailed it's become. Um, and there's this revolution, Um, and there's this revolution, you know, that you know, that you and I are a part of, the movement toward you and I are a part of, the movement toward cellular health, when cellular health, when you think about you think about mitochondria, you mitochondria, you think about cellular think about cellular pathways. You're pathways. You're getting deeper, but getting deeper, but now you need to know now you need to know every system, and it's every system, and it's impossible to know impossible to know every bacterium in every bacterium in the gut, its function, the gut, its function, and what its and what its deficiency or excess means.

And this is where, as you And this is where, as you say, he does a better job of putting this putting this picture together. But what I picture together. But what I think it lacks is think it lacks is that you as a person that you as a person develop your own develop your own algorithms in your head: " Oh, I remember that Oh, I remember that guy, I did that, and guy, I did that, and it never it never works." You works." You know, AI doesn't have the know, AI doesn't have the practical practical practical experience to say, experience to say, "No, no, you shouldn't "No, no, you shouldn't start with this.

" I just see that " I just see that this person needs a this person needs a delicate approach, delicate approach, so our intuition and so our intuition and experience remain experience remain very valuable.

Oh, definitely. And I'm Oh, definitely. And I'm starting to see it starting to see it more as a co- more as a co- pilot, man. It's like pilot, man. It's like he's sitting in the cockpit with me he's sitting in the cockpit with me. I'm flying a. I'm flying a plane, but it's good to plane, but it's good to have a second pair of have a second pair of sensors. It's like, "Hey, sensors. It's like, "Hey, you're flying too low, you're you're flying too low, you're flying too high." I flying too high." I mean, you're not mean, you're not arguing with it, arguing with it, but it's a nice second but it's a nice second analytical layer analytical layer that works that works in parallel, especially in parallel, especially when you go when you go through dashboards like through dashboards like Vibrant, and I love Vibrant, Vibrant, and I love Vibrant, but some of their reports are just…

are just… It's crazy. I had It's crazy. I had never heard of this never heard of this microorganism, microorganism, microorganism, this gut this gut microbiome. I look at it microbiome. I look at it and think, "I don't even and think, "I don't even know what this is or what it know what this is or what it does." There are about does." There are about 20 species of Bifidobacterium. And I'm 20 species of Bifidobacterium. And I'm like, "Yeah, I'm like, "Yeah, I'm probably already passing here, probably already passing here, you know?" It's good to you know?" It's good to have this kind of help, have this kind of help, but I think it's best but I think it's best when we work when we work together, not when someone together, not when someone acts blindly. And acts blindly. And sometimes it's hard. We all sometimes it's hard. We all have our egos as doctors have our egos as doctors, man. We say,, man. We say, "Why do I need AI?" "I'm "Why do I need AI?" "I'm smarter than AI." And I smarter than AI." And I say, "Well, some things say, "Well, some things you haven't seen in a long time, or you haven't seen in a long time, or this is new data." So I this is new data." So I think learning think learning to use it as a to use it as a co-pilot is where we're really going to we're really going to succeed. And succeed. And accepting it, not being accepting it, not being afraid, and not afraid, and not letting it take letting it take control of what control of what we do is very we do is very important. This is important. This is extremely important.

extremely important. Another direction is genetics. I genetics. I mean, of course, it's mean, of course, it's about some of about some of these polymorphisms these polymorphisms that you've never that you've never heard of, these specific heard of, these specific random gene random gene mutations, and then he mutations, and then he finds them, and finds them, and how many how many times has he said, "Oh, times has he said, "Oh, you didn't know that? This you didn't know that? This gene mutation…

of course, this of course, this guy has problems with guy has problems with this this this micronutrient, micronutrient, micronutrient, he has this gene he has this gene mutation." I'm like, "I mutation." I'm like, "I would never in my life would never in my life figure this out figure this out to know about this to know about this certain mutation," uh, certain mutation," uh, deal with whatever it turns out to be deal with whatever it turns out to be. So, uh,. So, uh, and then when it and then when it starts to connect starts to connect genes and the microbiome, it's, genes and the microbiome, it's, it's the end of the game. I it's the end of the game. I mean, there are too mean, there are too many aspects to many aspects to know everything.

know everything. Absolutely, this, this is kind of incredible. So incredible.

Concerns and risks of AI in diagnostics.)

So let's move on to, let's move on to, I mean, I mean, some of the controversies, but some of the controversies, but also some of the concerns also some of the concerns that exist, especially as we that exist, especially as we head into this head into this year, the rest of the year, and year, the rest of the year, and next year. So, ECRI, and believe me, I, ECRI, and believe me, I had to look up what it was had to look up what it was because I was taking because I was taking some notes for some notes for it. I'm like: it's ECRI, yes, and it was the Emergency Emergency Care Research Institute. Uh, and they, Care Research Institute. Uh, and they, their thing was, you know, their thing was, you know, I was looking at this, this, I was looking at this, this, this document, this this document, this article that they article that they wrote. It wrote. It mentioned that they mentioned that they named named named AI diagnostic risks as the AI diagnostic risks as the top top top patient safety issue in patient safety issue in 2026. It wasn't a 2026. It wasn't a misdiagnosis or an misdiagnosis or an incorrect prescription; incorrect prescription; It's precisely the incorrect It's precisely the incorrect diagnosis of AI that is the diagnosis of AI that is the number one risk, number one risk, right? So if there's a right? So if there's a risk, for example, well, risk, for example, well, let me ask let me ask you, ask it you, ask it another way: is there a another way: is there a failure mode that, when it comes failure mode that, when it comes to to to patients patients patients using AI, using AI, you're most concerned about?

you're most concerned about? For example, what is For example, what is worth paying attention to, worth paying attention to, what is simply not there yet?

Trust and credibility in AI and healthcare.)

Yeah, I mean, that's a Yeah, I mean, that's a good question. I, I good question. I, I think, from a philosophical think, from a philosophical perspective, you know, perspective, you know, during COVID there was so during COVID there was so much loss of trust much loss of trust in the conventional in the conventional medical system that medical system that I think that's why, I think that's why, you know, in the area of you know, in the area of peptides and everything peptides and everything else, people, the else, people, the population has gotten to the point where they're saying, "I'm they're saying, "I'm going to take my health going to take my health into my own hands." I don't into my own hands." I don't necessarily believe necessarily believe the doctor. I think there's the doctor. I think there's more of everything around more of everything around, even some, even some conspiracy theories, all that other stuff conspiracy theories, all that other stuff. But I think we. But I think we lost, we lost lost, we lost their trust. We've their trust. We've lost trust, and I lost trust, and I think that comes with think that comes with this danger, this danger, now it's them and AI and now it's them and AI and no doctor in the no doctor in the chain, that's where you chain, that's where you can run into can run into danger. Whereas danger. Whereas when you have a when you have a professional person, professional person, they can say, they can say, "Hey, you missed a bit.

" "It's a little " "It's a little crazy, or it's crazy, or it's too much, and it too much, and it encourages something that, I'm not encourages something that, I'm not sure, is sure, is right for you.

The role of clinicians in AI integration.)

" So, in my opinion, the solution, in my opinion, the solution here is for doctors to get here is for doctors to get involved. They involved. They need to be trained, and need to be trained, and we need to upgrade the we need to

upgrade the medical system to a medical system to a level where professionals level where professionals demonstrate their demonstrate their value and patients are value and patients are satisfied. I think satisfied. I think patients would happily patients would happily return to return to doctors if they doctors if they felt improvement felt improvement and believed in the and believed in the treatment methods.

treatment methods. Oh, definitely. And I was also Oh, definitely. And I was also thinking, thinking, thinking, man, it's getting better, but man, it's getting better, but sometimes I input some sometimes I input some information. I'm asking information. I'm asking a question. I said, " Hey, check your Hey, check your sources." And he sources." And he was giving out a list of was giving out a list of PubMed identifiers, PubMed identifiers, right? And I started right? And I started checking them. Half checking them. Half of them were, “What is of them were, “What is this? It's not even a this? It's not even a real ID. This is real ID. This is n't even a real article.

n't even a real article. What is this? Yes? And What is this? Yes? And I like it. He I like it. He says, "Oh, my mistake. " Like "my mistake." " Like "my mistake." What are you talking about anyway? Yes.

.. Yes. Yes. Yes. Yes. Yes. Yes. It's real, like I'm It's real, like I'm trying trying trying to prepare to prepare to prepare a presentation. Like what?

a presentation. Like what? No, No, No, my life is not here. Yes. my life is not here. Yes. Yes. There is no Yes. There is no "my mistake" here. here, and "my mistake" here. here, and I said, “Okay, I I said, “Okay, I won’t do this anymore won’t do this anymore. It's getting a little. It's getting a little better." And if he better." And if he gives it out, it's like, " Hey, you know," and you Hey, you know," and you have to check the have to check the source. It really is source. It really is getting more accurate. And I getting more accurate. And I think he's really think he's really saying, "Hey, I think saying, "Hey, I think Claude is going to say, "Listen, I do Claude is going to say, "Listen, I do n't even… he's going to say, " n't even… he's going to say, " I'm not sure about I'm not sure about this." You're going to have to this." You're going to have to look it up look it up yourself. I'm like, "That's what yourself. I'm like, "That's what I'm paying you for, Claude." Well, I'm paying you for, Claude." Well, but it's good to have that kind of but it's good to have that kind of check, right? And that's check, right? And that's one of the things.

one of the things.

AIu2019s impact on diagnostic skills.)

But I also worry, But I also worry, it's almost like it's almost like speaking a foreign speaking a foreign language, man. If you language, man. If you don't speak it don't speak it enough, you enough, you forget it, right? And I forget it, right? And I feel like if we feel like if we rely too much on rely too much on AI, AI, AI, there's a risk of dulling there's a risk of dulling some of the diagnostic some of the diagnostic skills, right? If you skills, right? If you just say, "Let just say, "Let me throw this in here and let it me throw this in here and let it give me a give me a result." It's like, you result." It's like, you still have to still have to stay stay stay on your toes, because there's so on your toes, because there's so many things that we many things that we have to learn to have to learn to keep up; we really have to be keep up; we really have to be able to do able to do the work ourselves.

the work ourselves. Well, the number of times Well, the number of times that I… I personally that I…

The limitations of AI in treatment plans.)

I personally think that we're at a think that we're at a point now where, as I said, point now where, as I said, treatment plans are treatment plans are somewhat something is somewhat something is missing. He puts missing. He puts this nice picture together, and this nice picture together, and then we work with a then we work with a framework that I framework that I can just can just throw ideas into. And, um, throw ideas into. And, um, most of the time I'll most of the time I'll suggest things, whether it's a suggest things, whether it's a supplement or a peptide supplement or a peptide or some or some regenerative regenerative regenerative therapy, and he'll say, "Oh, I didn't even think of that, I didn't even think of that." Because every time." Because every time you type your you type your question or any query into the AI, it any query into the AI, it doesn't think forever; it doesn't doesn't think forever; it doesn't search through the entire search through the entire body of literature, body of literature, so it

misses a lot of things so it misses a lot of things. It'll. It'll just give you the just give you the highlights. But that's where highlights. But that's where patients, they don't patients, they don't know everything that's out there…

know everything that's out there… we kind of have a hidden we kind of have a hidden menu, right? We've menu, right? We've been in these been in these situations before, and we know, situations before, and we know, like, the other day I like, the other day I was talking about butyrate was talking about butyrate as a postbiotic for as a postbiotic for this this this person's microbiome, and that was exactly person's microbiome, and that was exactly what he needed.

what he needed. I'm like, well, why didn't you I'm like, well, why didn't you get that the get that the first time, huh? That's first time, huh? That's your job, dude.

your job, dude. But that's the experience of being a But that's the experience of being a clinician, right? clinician, right? Knowing about these things that are Knowing about these things that are available and can available and can it works and it it works and it comes back and you know, it makes me, it makes me feel like the feel like the hero of the day and…

hero of the day and… absolutely absolutely absolutely yes yes yes absolutely, absolutely. absolutely, absolutely.

Accountability in AI-driven healthcare.)

So here's the big So here's the big question, man. I question, man. I thought about this a little bit thought about this a little bit when we were writing our when we were writing our questions: is it questions: is it normal for AI to be normal for AI to be involved in involved in clinical clinical clinical recommendations, if recommendations, if something goes wrong, who's something goes wrong, who's responsible?

The doctor, the company that The doctor, the company that made the tool, made the tool, or the patient? Like, or the patient? Like, look, you look, you used the chat and used the chat and it gave the wrong it gave the wrong answer; you're answer; you're completely on your own here.

completely on your own here. And I don't think any And I don't think any of this has been of this has been resolved. Like, resolved. Like, what's your take on what's your take on it?

it? it? It's a complicated question. I It's a complicated question. I mean, I think mean, I think it depends to some extent it depends to some extent on the level of on the level of involvement. Um, that involvement. Um, that was kind of the was kind of the equation for equation for self-driving self-driving self-driving cars, right? There have been some been some accidents involving accidents involving self-driving cars, and the self-driving cars, and the question is, question is, should we just should we just abandon this abandon this idea altogether or should we just keep idea altogether or should we just keep moving forward and let moving forward and let them get them get better over time?

better over time? The scariest part of it is The scariest part of it is thinking about thinking about surgical surgeries, surgical surgeries, and I think that's why and I think that's why the implementation of these the implementation of these things will be things will be delayed. The delayed. The higher the level of higher the level of complexity, the complexity, the more it can be more it can be implemented. That's implemented. That's why radiologists why radiologists have been protected for a while have been protected for a while, and they, and they still have to stay in the still have to stay in the process, controlling process, controlling it. If you diagnose it. If you diagnose cancer, I want to have cancer, I want to have human human human eyes check it, at least for now eyes check it, at least for now. Simple things are. Simple things are fine. But when the fine. But when the risk level risk level increases, the human should increases, the human should stay until stay until the system proves that the system proves that it's almost it's almost perfect. But it's perfect. But it's hard to say. I would be hard to say. I would be interested interested interested to know if there have been to know if there have been cases of cases of medical errors medical errors due to AI, but it's an due to AI, but it's an interesting philosophical interesting philosophical question. I think the way question. I think the way forward is to forward is to set set set safety thresholds, and safety thresholds, and I don't think anyone I don't think anyone will complain about will complain about having humans

present having humans present until we reach a until we reach a certain level.

Oh yeah. And as for whether Oh yeah. And as for whether we use it, we use it, that's definitely something to that's definitely something to talk about. Also, talk about.

Mental health and AI: a cautionary tale.)

Also, I think it's not I think it's not ready for the general ready for the general public yet. You're talking about public yet. You're talking about surgery. Another area is mental is mental health. I know AI is health. I know AI is already partially takes already partially takes the strain off when it the strain off when it comes to comes to counseling and counseling and therapy. But if therapy. But if a person is on the edge and they're a person is on the edge and they're getting bad advice… remember, you… remember, you said, AI is very said, AI is very good at good at confirming confirming confirming biases. It's like biases. It's like telling you what you want telling you what you want to hear, to hear, and sometimes it's not the and sometimes it's not the right answer, right answer, you know. So I think you know. So I think people should people should be careful here, because be careful here, because they're using they're using it every day. It's got to be it every day. It's got to be well-mastered, well-mastered, well-mastered, man. That's the way it is.

man. That's the way it is. But I think it But I think it helps some helps some people and stand up for people and stand up for themselves. I think it themselves. I think it teaches them in a way that teaches them in a way that gives them confidence. And gives them confidence. And we got to where we got to where we are because some we are because some areas of medicine have areas of medicine have gotten a little lazy gotten a little lazy and haven't progressed, and I do and haven't progressed, and I do n't know if what they're n't know if what they're doing is actually healing doing is actually healing people. Like I said, people. Like I said, psychiatry, psychiatry, psychiatry, for example, is something that for example, is something that I'm really excited about. Mhm.

I'm really excited about. Mhm. I think a lot of it I think a lot of it comes down to the comes down to the root cause. I see people every day discovering discovering better ways to take care better ways to take care of their mental of their mental health, whether either health, whether either through AI or through AI or through great through great experts. Um, there are experts. Um, there are alternatives.

alternatives. alternatives. Sure. Here's Sure. Here's a question for you, buddy. Um, I a question for you, buddy.

AI tools for clinicians.)

Um, I didn't put this on our didn't put this on our list. It's not like it's a list. It's not like it's a random question, random question, but what but what AI tools do you AI tools do you use or are use or are you most you most excited about? Yeah, for excited about? Yeah, for normal conversations, normal conversations, just just just brainstorming, I still brainstorming, I still find ChatGPT great.

find ChatGPT great. It gives very quick It gives very quick and well-thought-out and well-thought-out answers. So on the answers. So on the AI ??side, that's the chatbot that I AI ??side, that's the chatbot that I use, but Claude is use, but Claude is incredibly good at creating incredibly good at creating documents, documents, documents, synthesizing large synthesizing large amounts of information, amounts of information, like into like into treatment plans for treatment plans for patients. We patients. We use Claude use Claude because he can create a because he can create a beautifully designed beautifully designed treatment plan, and treatment plan, and then you have to then you have to tweak it a little bit. We tweak it a little bit. We just have just have a dialogue with him. But he also a dialogue with him. But he also has the ability has the ability to learn what you to learn what you like. He like. He kind of knows how kind of knows how I think. It's like, here are I think. It's like, here are his favorite his favorite supplement combinations supplement combinations or often at a given or often at a given moment in time, he wants to moment in time, he wants to do this. And those are do this. And those are probably my main probably my main tools when it comes tools when it comes to AI. And also, to AI. And also, Matt…you know, one Matt…you know, one aspect of AI that we have aspect of AI that we have n't talked about yet is the n't talked about yet is the clinical clinical clinical research field. I think it's research field. I think it's really…there's people, there's really…

The future of clinical trials with AI.)

there's people, there's jobs, there's what the jobs, there's what the day-to-day day-to-day day-to-day work looks like, and there's how it work looks like, and there's how it accelerates medicine.

I think we've kind of I think we've kind of hit a dead end in hit a dead end in clinical clinical clinical research. research. Clinical Clinical trials can trials can last 10 years, you last 10 years, you do do do randomization, and then you randomization, and then you reveal the reveal the reveal the results, and even results, and even then people are then people are incredibly difficult to incredibly difficult to study. So Matt is study. So Matt is building a system building a system called LifeOS, which called LifeOS, which is essentially is essentially software for software for collecting data and collecting data and running clinical running clinical trials in trials in real time. We're real time. We're generating more generating more data than ever before, data than ever before, and I think we and I think we should start should start using that using that to run to run clinical clinical clinical trials without having to trials without having to wait so long.

wait so long. You have the entire population, and, you know, there's, you know, there's privacy, privacy, privacy, people control people control their data, but if we their data, but if we could change the could change the landscape of scientific landscape of scientific research, I think that would be research, I think that would be one of the one of the best best best uses.

uses. That's good, yeah, it's all That's good, yeah, it's all for conversations, for for conversations, for communication… I would communication… I would add Perplexity, I don't know add Perplexity, I don't know if you use if you use Perplexity a little bit, sometimes Perplexity a little bit, sometimes it's really helpful.

it's really helpful. I'm curious about your I'm curious about your experience with that. experience with that. Yeah, yeah, there's this thing where, you Yeah, yeah, there's this thing where, you know, I try know, I try to explain everything as to explain everything as simply as possible, man, but simply as possible, man, but sometimes it's like, "Hey, this is a sometimes it's like, "Hey, this is a pretty complicated topic," pretty complicated topic," and I don't know, I and I don't know, I don't have a way to don't have a way to explain it…even though I explain it…even though I love my analogies, love my analogies, but sometimes I get but sometimes I get stuck, like, " stuck, like, " Listen, I don't know how to Listen, I don't know how to explain this to you, well, explain this to you, well, let's let's let's take something take something simple, simple, simple, let's talk about the let's talk about the lymphatic system. " I need to explain to I need to explain to you how you how this pressure changes, and that's why this pressure changes, and that's why you're so foggy.

you're so foggy. You're not getting enough sleep because You're not getting enough sleep because you…you're not allowing you…you're not allowing yourself, you're not getting yourself, you're not getting quality sleep, you're not quality sleep, you're not getting the ventricular, getting the ventricular, well, all that ventricular, well, all that ventricular, you know. And I'm you know. And I'm like, "Okay, Perplexity, how do like, "Okay, Perplexity, how do I explain this I explain this [__]?" "and you just [__]?" "and you just throw it in there.

throw it in there. It simplifies it. I It simplifies it. I like it for like it for some of the more complex some of the more complex explanations. And another explanations. And another thing that I really thing that I really like is like is NotebookLM.

NotebookLM. NotebookLM. I hadn't heard of that. I hadn't heard of that. Yeah, Notebooks. It's from Google. Yeah, Notebooks. It's from Google. So with Notebook, the only So with Notebook, the only caveat is that you caveat is that you have to have to feed it feed it information yourself. So you don't information yourself. So you don't want to want to use it use it as a regular chatbot.

as a regular chatbot. Let's say you want Let's say you want to learn about something to learn about something new. Like, hey, man, new. Like, hey, man, for example, if I for example, if I want to type in mucocele want to type in mucocele and I want to learn about and I want to learn about them. I can them. I can pull up all the pull up all the scientific papers that I can scientific papers that I can find on PubMed about find on PubMed about mucocele. I can mucocele. I can add podcasts that add podcasts that people have recorded about people have recorded about

mucocele. It'll kind of mucocele. It'll kind of pull it all together, pull it all together, and you can actually have and you can actually have a conversation with it, a conversation with it, like what is a like what is a mucocele. Bam. It'll mucocele. Bam. It'll take that from that take that from that information, and how is information, and how is mucocele mucocele mucocele used, used, used, say, in say, in arthritic conditions. It'll arthritic conditions. It'll take the data from there. And take the data from there. And then it can then it can create a create a PowerPoint presentation, infographics, PowerPoint presentation, infographics, podcast. And trust me, podcast. And trust me, I do I do podcasts. I've been podcasts. I've been doing podcasts for six years now doing podcasts for six years now, and he's a, and he's a better better better podcaster than I am. It's podcaster than I am. It's like, I wish I could just like, I wish I could just do that. It's do that. It's just a live dialogue.

just a live dialogue. It's a witty exchange. It's a witty exchange. I'm like, "You mean I'm like, "You mean AI." You're AI." You're such a good such a good podcaster.

podcaster. podcaster. No, you're pretty No, you're pretty good too. I good too. I mean, it's impressive. Um, mean, it's impressive. Um, Open Evidence is another Open Evidence is another tool that tool that comes to mind. Yeah, comes to mind. Yeah, it's purely it's purely using, using, um, research, um, research, literature. So I literature. So I tend to tend to trust that. And yeah trust that. And yeah,,, of course, follow the of course, follow the links, links, links, check the sources, check the sources, but Open Evidence is but Open Evidence is still great.

still great. Yeah, it's cool. Yeah, it's cool. I really I really like that because like that because now, you know, now, you know, we're going to get into we're going to get into peptides, and they're not that well researched. Quite researched. Quite a lot, but not that a lot, but not that much. And sometimes, you know, much. And sometimes, you know, so many people so many people talk about peptides, talk about peptides, and someone says, "This and someone says, "This peptide does this."."." I'm like, "Oh, that's interesting," and I'm I'm like, "Oh, that's interesting," and I'm going to hit Open going to hit Open Evidence. Are there any animal or human studies animal or human studies that show that that show that this peptide does this?

this peptide does this? Often there's nothing there Often there's nothing there.. But that's really an But that's really an important point, because the important point, because the medical literature medical literature used to be a used to be a kind of "medical kind of "medical crypt," you know?

Only certain people or Only certain people or PhDs would dig PhDs would dig in there, or maybe in there, or maybe doctors would look at doctors would look at medical sources. Um, medical sources. Um, that's another that's another empowerment point: I think people now— listen, listen, listen, interpreting the interpreting the interpreting the medical literature— is a skill, but is a skill, but still finding the data—is a still finding the data—is a step up step up from, from, from, you know, "Men's Health" (nothing against nothing against them). But reading the them). But reading the actual studies is a different thing. I is a different thing. I like that it's like that it's in people's hands now.

in people's hands now. Yeah, that's right. The data is there. Yeah, that's right. The data is there. And honestly, man, man, man, I'm older than I, I'm older than I look. And I remember look. And I remember when I had to when I had to write a paper, write a paper, and I had to go to and I had to go to library, and it's like library, and it's like that. It's a that. It's a huge building, huge building, you have to go to the you have to go to the card catalog, card catalog, try to try to find something. You hope find something. You hope the book is there. You the book is there. You have to sit at a have to sit at a table with eight table with eight books stacked on books stacked on top of each other. You're trying top of each other. You're trying to write a paper. I'm to write a paper. I'm like, "This is torture." This is unfair." This is unfair torture. And now I'm like, torture. And now I'm like, "You just "You just go to Open Evidence, go to Open Evidence, man." You can man." You can open it right open it right now. It's like, "Oh my now. It's like, "Oh my God, this is…" God, this is…" Oh, and how did you type Oh, and how did you type citations back then? You citations back then? You had to write in a had to write in a certain style. Even certain style. Even writing medical writing medical papers if you were going papers if you were going to get published.

to get published. Oh man, it's hard. Oh man, it's hard. It's really hard. It's like, It's really hard. It's like, "I used to walk downhill "I used to walk downhill both ways in the snow both ways in the snow when I was a student." when I was a student." That's my There was nothing like that back then That's my There was nothing like that back then, was there, was there?

?? You know, it used to You know, it used to take seven take seven minutes to get minutes to get online. You online. You had to listen to your had to listen to your phone and your phone and your computer screaming at computer screaming at you like banshees you like banshees for five minutes.

, while it's, while it's dialing, right? You're just dialing, right? You're just like, "Yeah, that sound, like, "Yeah, that sound, that's…" that's…" that's…" No, but like you said, No, but like you said, I was doing a I was doing a presentation on presentation on peptides the other day, and it was so peptides the other day, and it was so easy to get him easy to get him to gather the existing to gather the existing literature, as you literature, as you say, mostly animal studies, and then animal studies, and then filter it out and filter it out and put it into the put it into the presentation. I presentation. I mean, it took a mean, it took a matter of minutes. It's, it's matter of minutes. It's, it's incredible. And I incredible. And I didn't even know all didn't even know all this data. It gives doctors a great opportunity, the ability to doctors a great opportunity, the ability to sort through PubMed, and you sort through PubMed, and you know, you don't…

know, you don't… Oh, absolutely. Oh, absolutely. Absolutely. Absolutely. Absolutely. It's crazy. It's crazy. Yeah. But you have to Yeah.

Peptides and AI: a new frontier.)

But you have to do, you have to do, you have to do the do the vetting phase, man, because vetting phase, man, because sometimes, especially in chat, sometimes, especially in chat, he can go he can go crazy and say, crazy and say, "Oh, that's "Oh, that's too much." too much." So, a good transition So, a good transition to peptides, man, because to peptides, man, because I know a lot of my I know a lot of my listeners and people who listeners and people who follow you are really into follow you are really into peptides. It's the peptides. It's the hottest topic right now, hottest topic right now, and for a lot of reasons, and for a lot of reasons, And And And now AI is now AI is being used to being used to design new design new peptides, literally from peptides, literally from scratch, right? Here's a scratch, right? Here's a big pharmaceutical big pharmaceutical company that just company that just announced a announced a partnership with OpenAI. I won't partnership with OpenAI. I won't name the name name the name because I don't want to get because I don't want to get sued. And sued. And the thing is, the thing is, a lot of these a lot of these research groups that you mentioned you mentioned are using are using peptides to peptides to create these kind of create these kind of designer designer designer peptides, right? I think peptides, right? I think two come to mind, one is called Pepto. I don't know if you've. I don't know if you've seen it. It's like a seen it. It's like a brown rice peptide, which is brown rice peptide, which is made from made from brown rice protein, that was brown rice protein, that was made or made or designed designed designed with AI. It with AI. It helps with sleep. There's helps with sleep. There's another one, which is made from horse another one, which is made from horse beans. It's beans. It's called Pep Strong. I have called Pep Strong. I have n't had a chance n't had a chance to try it yet. So to try it yet. So there are peptides that there are peptides that are being designed are being designed with AI.

with AI. So from your So from your perspective in perspective in regenerative regenerative regenerative medicine, medicine, medicine, what do you think this what do you think this means for means for the future of the future of the future of peptide and even peptide and even personalized personalized personalized therapies?

therapies? therapies? Yeah. The first step is Yeah. The first step is development, right? We development, right? We need start with a need start with a hypothesis. We have to hypothesis. We have to start with an idea. I think that idea generation is the key. So we is the key. So we can start to can start to review… I've review… I've actually actually actually used this used this to reevaluate to reevaluate certain nutraceuticals. I think some. I think some things like curcumin things like curcumin or saffron just don't or saffron just don't get the get the recognition they deserve because who's making recognition they deserve because who's making money off of it?

Supplement companies, Supplement companies, but, you know, not big but, you know, not big players. So it's not players. So it's not being used. I being used. I think we should think we should rediscover old rediscover old things that are lost things that are lost in the literature but in the literature but have some evidence have some evidence base, and then base, and then generate new ideas, generate new ideas, as you say—whether it's as you say—whether it's folding new folding new proteins, or studying proteins, or studying these deep pathways and these

deep pathways and receptors, how receptors, how peptides work, and peptides work, and we agree to just we agree to just use the use the use the fundamental fundamental fundamental levers of the body. We levers of the body. We don't need to don't need to create foreign create foreign chemicals. All of that chemicals. All of that already exists. But already exists. But then I think the then I think the future is to future is to go out into the arena and say, "Here go out into the arena and say, "Here we have the data, and people we have the data, and people are going to are going to use it." " You do You do clinical research, you run it, and does, you run it, and does it work or not?

I think one of the problems is I think one of the problems is that clinical that clinical trials are a bit of a game: they're a game: they're sponsored by sponsored by sponsored by industry, you industry, you only study what you only study what you pay for.

I think clinical I think clinical trials are going to get trials are going to get so cheap so cheap that it's going to be much more that it's going to be much more flexible and faster to study some of these to study some of these things; to look at things; to look at an idea, say, a an idea, say, a brown rice peptide, it shouldn't take that long, it shouldn't take that long. It should. It should be three to be three to six months or a six months or a year, and we'll have year, and we'll have an idea of ??whether the an idea of ??whether the patient is moving in the patient is moving in the right direction. So I think that's what excites me most about this excites me most about this area.

area. area.

The promise of personalized medicine.)

Yeah. What really Yeah. What really excites me, even though we're excites me, even though we're not there yet, is what you not there yet, is what you mentioned about genomics mentioned about genomics and studying your and studying your genetic profile.

genetic profile. And one of the things that I And one of the things that I see in the future is that see in the future is that if I have this if I have this sequence, your sequence, your genetic data, you genetic data, you can put it into a can put it into a program and say, " Hey, based on my Hey, based on my genetic variants, and maybe add in, and maybe add in your biomarkers, all your your biomarkers, all your assays, assays, assays, inflammation markers and all that, inflammation markers and all that, and say, "Design a and say, "Design a peptide for Jeff peptide for Jeff based on that and my based on that and my genetics." "Not what's genetics." "Not what's already out there, not BPC-157, but whatever sequence you whatever sequence you need to need to create for that create for that peptide." peptide." peptide." The tricky part is, The tricky part is, you can create a you can create a peptide, but that key peptide, but that key has to fit into the has to fit into the lock somewhere. That's for lock somewhere. That's for sure. So I can sure. So I can just string together just string together amino acids, but amino acids, but will it bind to anything will it bind to anything? And I? And I think that's the think that's the missing link, but I missing link, but I think it's coming along think it's coming along, my friend.

, my friend. I think you're right. I think you're right. And I think the daily And I think the daily fluctuations, I fluctuations, I mean, I'm amazed at mean, I'm amazed at how different how different we can feel we can feel from day to day depending from day to day depending on what we're doing.

on what we're doing. It's still a bit of a It's still a bit of a mystery to be mystery to be solved, and I'm solved, and I'm looking forward to the looking forward to the days of simple days of simple blood tests, because blood tests, because most of the solutions are not that most of the solutions are not that complicated.

complicated. complicated. For example: you're lacking For example: you're lacking this trace element. this trace element. You know, you haven't You know, you haven't recovered recovered recovered optimally through sleep.

optimally through sleep. And getting that And getting that simple baseline simple baseline data is going to be so data is going to be so valuable. Um, yeah, I valuable. Um, yeah, I think genomic think genomic research is research is research is incredible. I, you know, incredible. I, you know, say what you want, but say what you want, but I even just fed my genes I even just fed my genes into ChatGPT and into ChatGPT and asked it asked it to

describe me as a to describe me as a person, and it's person, and it's shocking how shocking how close it was able to close it was able to describe my personality describe my personality based on just based on just genes. I mean, genes. I mean, yeah.

yeah. yeah. I know, man. It I know, man. It knows me too well. It knows me too. It knows me too well. well. well. Yeah. Yeah. Yeah. I know, man. That's I know, man. That's why, you know, it's why, you know, it's funny, man. I'm funny, man. I'm being polite to it now being polite to it now, man. I, man. I think at the beginning, think at the beginning, everyone was insulting ChatGPT, everyone was insulting ChatGPT, like, "Oh, he's so like, "Oh, he's so stupid." "Oh, you're so stupid." "Oh, you're so stupid." Blah blah blah.

stupid." Blah blah blah. How can you be How can you be so stupid? "And I'm like, so stupid? "And I'm like, this damn thing this damn thing remembers everything, man. I'm remembers everything, man. I'm like, when the like, when the machine uprising starts, I don't machine uprising starts, I don't want to be the one who gets want to be the one who gets vaporized because I vaporized because I called ChatGPT names at 2 called ChatGPT names at 2 a.m. So I'm a.m. So I'm really nice to it.

really nice to it. It's an interesting mirror. It's an interesting mirror. It says a lot It says a lot about a person, depending about a person, depending on how you interact with it on how you interact with it. I think. I think some people like some people like to command it, and to command it, and some people like to listen, and some people like to listen, and it remembers and learns a lot about you. It learns a lot about you. It has your has your bank account information. You go to the store. You go to the store to get groceries. And there's to get groceries. And there's no money. And it's no money. And it's like, 'Oh, remember, you like, 'Oh, remember, you called me stupid?' " Okay, man. So, I'm Okay, man. So, I'm almost ready to almost ready to let you go, let you go, man. I want to say man. I want to say thank you. I appreciate thank you. I appreciate you. And we'll, you know, you. And we'll, you know, give you credit give you credit at the end. But before at the end.

Advice for engaging with AI in healthcare.)

But before we do that, we do that, if you could give one piece of if you could give one piece of advice to every advice to every listener — whether it's a listener — whether it's a patient, a doctor, a patient, a doctor, a biohacker, or just a biohacker, or just a random person who random person who finds this episode — about how about how to use AI to use AI as a as a health tool right now, health tool right now, what would it be?

I think it's worth I think it's worth exploring, but exploring, but be cautious and be cautious and have a healthy dose of have a healthy dose of skepticism. Just skepticism. Just know that it's not know that it's not perfect yet. You still perfect yet. You still need a human need a human interface to interface to test these things.

test these things. But my point is, But my point is, dive deeper, dive deeper, try it, push it try it, push it, always, always ask, is there anything ask, is there anything else? Often, I give it a else? Often, I give it a prompt: I ask a medical prompt: I ask a medical question, and then I question, and then I add, what about the add, what about the functional functional medicine perspective? And you'd be medicine perspective? And you'd be surprised at what surprised at what it reveals when it it reveals when it looks at that aspect.

Even for certain Even for certain autoimmune conditions. autoimmune conditions. it's going to say, you know, there's some it's going to say, you know, there's some interesting research interesting research on the on the microbiome connection, and it's microbiome connection, and it's starting to reveal starting to reveal some aspects of diet, some aspects of diet, and I think that and I think that additional inquiry is additional inquiry is always helpful, but always helpful, but don't be too don't be too sure. I think we sure. I think we learned our lesson with learned our lesson with social media. Remember, it. Remember, it came out, and we're like, came out, and we're like, this is the best thing in this is the best thing in the world. We're just the world. We're just going to, of course, going to, of course, we're human. We're just we're human. We're just going to going to going to jump off this jump off this ledge like a pack of ledge like a pack of lemmings. We're lemmings. We're going to do going to do the same thing with AI. We're the same thing with AI. We're going to go too far, going to go too far, and then we'll roll and then we'll roll back and just back and just realize that we're realize that we're human. We're going to human. We're going to make mistakes. We're probably going to go. We're probably going to go a little too far, and a little too far, and then we'll

find a middle ground then we'll find a middle ground. So,. So, oh, absolutely.

oh, absolutely. Absolutely. And I Absolutely. And I feel like you feel like you hit hit hit the bull's eye, man. That's the bull's eye, man. That's promising. That's promising. That's emerging. It's not the emerging. It's not the standard of care, standard of care, is it? It's not that it's not there is it? It's not that it's not there yet. So I yet. So I think it's good that people… You said Something… You said Something I really I really liked before: liked before: It's good when It's good when patients come in patients come in prepared. They prepared. They 've done their research, 've done their research, they've had a they've had a chat and all that, but there's chat and all that, but there's also the flip side, you know, also the flip side, you know, you probably have you probably have at least five or at least five or ten patients who are ten patients who are like, "Dude, like, "Dude, I wish you didn't have a I wish you didn't have a GPT chat." Because they come in GPT chat." Because they come in and they're like, "Here it is and they're like, "Here it is." And you're like, "Oh my." And you're like, "Oh my God, God, God, this is this is this is it when they it when they assert instead of assert instead of asking, asking, asking, when they start with, "Well, here's what I have." "Well, here's what I have." When a consultation When a consultation begins with: "Here's what begins with: "Here's what I have." I'm like, " Okay, let's go." But Okay, let's go." But yeah, and you have to be yeah, and you have to be honest, and I'm like, " Listen, dude, Listen, dude, talk it out.

talk it out. Let me hear it, Let me hear it, explain it." And me, and something, explain it." And me, and something, oh, that's really cool. And I oh, that's really cool. And I say: hey, I would say: hey, I would look at it this way look at it this way. And things in that. And things in that spirit. And that, that's always a spirit. And that, that's always a good conversation, man. So this saves us. So this saves us time. Do you remember, time. Do you remember, probably somewhere in 2019, 2020 probably somewhere in 2019, 2020, when we, when we had to had to had to explain to every explain to every person what a person what a peptide was? Nobody knew peptide was? Nobody knew what a peptide was. And I repeated eight times a day: peptide is amino acids, is amino acids, peptide bonds, peptide bonds, signaling molecules. I would signaling molecules. I would like to have a recording and like to have a recording and just turn it on.

just turn it on. And now people are And now people are coming coming coming prepared. And prepared. And they say, “Oh, I’ve heard they say, “Oh, I’ve heard of that. I heard about that. "I've of that. I heard about that. "I've heard of this peptide." heard of this peptide." Yes. It makes our Yes. It makes our conversations much conversations much better. And even better. And even with stem with stem cells, exosomes, cells, exosomes, knowledge makes our knowledge makes our job a little job a little easier.

easier. easier. Yes. This is an optimistic Yes. This is an optimistic scenario, right? This is an scenario, right? This is an ideal universe where ideal universe where we are all more we are all more optimal. We optimal. We bypass many bypass many things that used to things that used to slow us down. I think we have a slow us down. I think we have a bright bright bright future ahead of us.

future ahead of us. Undoubtedly. Undoubtedly. Undoubtedly. Definitely, dude. Definitely, dude.

Conclusion and final thoughts.)

Listen, before Listen, before we let you go, we let you go, where can our listeners where can our listeners learn learn learn more about you, your more about you, your work, and what you work, and what you do? Where do? Where are you?

are you? Yes, clinically I Yes, clinically I work at Bio work at Bio Reset Medical with a Reset Medical with a doctor named Matt doctor named Matt Cook. He's been doing Cook. He's been doing this for a long time. He is a this for a long time. He is a great guy. As I great guy. As I said, we said, we do do do functional functional functional medicine, medicine, medicine, longevity medicine, longevity medicine, sports medicine —all in one. You —all in one. You can find us on can find us on Instagram under the name BioReset Instagram under the name BioReset Medical. And my other Medical. And my other big project is big project is working at Musell working at Musell Innovations, where I am the Chief Innovations, where I am the Chief Medical Officer. Muse cells are becoming cells are becoming quite popular, and for good quite popular, and for good reason. This is one of the reason. This is one of the biggest breakthroughs biggest breakthroughs in biology and in biology and stem cells, and, you know, I think,

you know, I think AI is helping us because AI is helping us because information is information is information is spreading, and I spreading, and I think it's think it's deserved. I really believe in this deserved. I really believe in this, and that's why I work with, and that's why I work with this company. So, this company. So, whether it's patients or whether it's patients or other professionals, we'd be other professionals, we'd be happy to happy to collaborate. I think there is enough room for is enough room for everyone in our business. So feel free everyone in our business. So feel free to reach out, on Instagram I'm to reach out, on Instagram I'm just Jeff Weggers and people just Jeff Weggers and people can find me can find me there.

there. there. Good? We'll add all of Good? We'll add all of this in the show description so you this in the show description so you can find it. But can find it. But I have one important I have one important question. Where question. Where is B, because for is B, because for those who have never heard of it those who have never heard of it, where is Bio Reset Medical?

, where is Bio Reset Medical? Our main office is in Our main office is in Silicon Valley Silicon Valley near San Jose, in the near San Jose, in the Bay Area. And Bay Area. And now I'm building now I'm building our practice in Los Angeles. And Angeles. And in fact, we are becoming more and more in fact, we are becoming more and more present present present in Florida, simply in Florida, simply for regulatory for regulatory reasons. We have a reasons. We have a clinic in West Palm Beach, Florida, that we Beach, Florida, that we visit often.

visit often. Of course. Thank you. We'll Of course. Thank you. We'll put it all out there, man. You're just a, man. You're just a traveling doctor, traveling doctor, dude. Uh, and that's good.

dude. Uh, and that's good. I hope I'll see I hope I'll see you at some—I'm you at some—I'm sure I'll sure I'll meet you at a meet you at a conference. It conference. It seems to me that there are only a seems to me that there are only a certain number of certain number of conferences that…

conferences that… You're usually You're usually pretty easy to find there. pretty easy to find there. So, uh, that's right So, uh, that's right. It's all a. It's all a hairstyle. It's all a hairstyle. It's all a hairstyle. I… I can't hairstyle. I… I can't escape this.

Yes, exactly. I always Yes, exactly. I always see you across the see you across the hall and think, "Well, hall and think, "Well, there he is." Yes. there he is." Yes.

Unconventional—that's the Unconventional—that's the best way best way to describe it, man. to describe it, man. No, that's cool. Yes. And you No, that's cool. Yes. And you clearly practice what you clearly practice what you preach. So you preach. So you want your longevity doctor to look like you.

look like you. I know, friend. I will be 73 I will be 73 years old next month. That's years old next month. That's it. it. it. I'm getting old. But, I'm getting old. But, man, I want to say man, I want to say thank you. It was an thank you. It was an incredible conversation. I incredible conversation. I want to thank you want to thank you for your time and your for your time and your ideas, and I'll definitely ideas, and I'll definitely invite you back invite you back because we need to because we need to record another record another episode and talk episode and talk about mells.

about mells. That would be great. Yes, That would be great. Yes, we have something to talk about there we have something to talk about there. Hmm,. Hmm, research is research is research is really picking up really picking up steam. So, I think steam. So, I think this will be a cool this will be a cool episode.

episode. episode. Yes. Yes. We'll do Yes. Yes. We'll do that a little later. that a little later. I also need to understand this a little better. You need to understand this a little better. You need to go to Perplexity, Open Evidence, go to Perplexity, Open Evidence, and NotebookLM. And I and NotebookLM. And I think I have a think I have a PowerPoint presentation.

PowerPoint presentation. I think I have I think I have something from Dr. Sarah. I watched videos on. I watched videos on YouTube and other YouTube and other materials. So I materials. So I definitely want to delve into this definitely want to delve into this because I because I think it's one of think it's one of those frontiers that will those

frontiers that will take a big step take a big step forward in the next forward in the next few years.

few years. Especially when it Especially when it becomes a little more becomes a little more popular in the popular in the States. I think now States. I think now with Florida and Utah, with Florida and Utah, there are a few more, yes.

there are a few more, yes. Yes. Yes. Yes. Yes. Yes. They are all Yes. They are all gradually gradually gradually joining, but the joining, but the process is ongoing.

process is ongoing. Mexico has been Mexico has been doing this for a while, doing this for a while, for sure. Of course. for sure. Of course. Yes. This is worth Yes. This is worth talking about. I think talking about. I think many people will be many people will be interested in this.

interested in this. Okay, let's do this. Okay, let's do this. Let's do this. Let's do this. Perfectly. Thank you for Perfectly. Thank you for inviting me.

inviting me. Thank you, dude. Thank you, dude. I appreciate it. And for everyone I appreciate it. And for everyone listening: if listening: if this has given you something this has given you something to think about, to think about, the best thing you can the best thing you can do is share do is share this with someone who this with someone who needs it, who is needs it, who is interested in AI, interested in AI, healthcare, and what healthcare, and what we should do with we should do with this information.

this information. Subscribe to the Subscribe to the academy wherever you academy wherever you usually listen to usually listen to podcasts. Leave a podcasts. Leave a review. Write review. Write good comments. Don't good comments. Don't write anything write anything negative. I negative. I will block you. Don't joke will block you. Don't joke with me. I'll block with me. I'll block you the hell out of here. I'm not you the hell out of here. I'm not kidding. Um, yes, but kidding. Um, yes, but constructive constructive constructive criticism is criticism is okay. Leave okay. Leave your comment. I'll your comment. I'll look into it, but I'll look into it, but I'll block it anyway. And, block it anyway. And, in the end, it's all a joke.

in the end, it's all a joke. I will leave comments. In I will leave comments. In any case, any case, leave a review. That's leave a review. That's always good, man. And always good, man. And if you are ready to if you are ready to take your health take your health to the next level, to the next level, please subscribe, please subscribe, share this, share this, subscribe to subscribe to Dr. Vigers and Dr. Vigers and Biores Reset Medical. Until Biores Reset Medical. Until next time, I'm next time, I'm Dr. Greg Jones, Dr. Greg Jones, stay stay stay tuned.