Your Questions Answered - Bret and Heather 87th DarkHorse Po...

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**SUMMARY KEYWORDS**

vaccines, people, question, point, problem, happened, vaccinated, true, extrapolation, lockdowns, claim, unvaccinated, long, monkeys, cases, thinking, private, animal, sense, effects

**SPEAKERS**

Bret, Heather

**Bret** 00:09

Hey folks, welcome back to the Dark Horse podcast live stream q&a number 87. Sorry for the long delay. We were waiting for Odyssey to update, we've alerted them to the problem. Anyway, hopefully that will be a shortened process in the future. Indeed, we are ready for questions and answers.

**Heather** 00:28

Yes, we are. So we are going to do this abbreviated because man, it's late. It's been a long it's been a long number of things. Ta do this abbreviated. Usually you're better at acronyms.

**Bret** 00:44

Yes, and jokes, but it's late. That's the thing is this is a comparatively late stream. It is sir. they've suffered.

**Heather** 00:50

It is Yes. All right. There have been written? Well, there have been multiple recent reports from the US media stating that 99.8% of new COVID deaths are in the unvaccinated. The claims of about 99% are not even close to the data we have in the UK, where a significant number of COVID s are unvaccinated people for obvious reasons, they are the most vulnerable thoughts. So I mean, I think this is a question about the well, we could read out one of two ways, right? Like, that's a big inconsistency. Why would there be an inconsistency? Or is this so clearly not likely, that we should be reading this as monkeying with the baseline?

**Bret** 01:31

Well, let me say, one, it is impossible to know, it is possible that different populations are going to have different effects based on different variants, different vaccination schemes, yeah. Something is clearly going to happen where vaccination has an impact on the emergence of variants, those variants may well affect those who are unvaccinated more profoundly, and the vaccines do seem to have an impact on the severity of disease. So anyway, that I think it is very important two things are very important one not to leap to conclusions about what means what that I do believe that the unvaccinated are going to be blamed for what is going to happen no matter what

**Heather** 02:17

we're already seeing.

**Bret** 02:19

But the other thing is, if there's one overarching lesson to COVID, it is that our inability to figure out just simply what is happening to measure obvious things and see whether they go up or down in response to this or that this inability to know who is sick with COVID, who is has not had COVID is appalling. And in addition to figuring out how to get our perverse incentives straightened out, so they don't interfere with public health policy, we absolutely have to figure out how to get our basic information collection apparatus clear so that we can sort real paradoxes from nonsense that arises just out of low quality measures and self sabotage.

**Heather** 03:08

Yeah, very good.

**Heather** 03:11

I am getting no shortage of snark regarding lab lake and ivermectin, any ideas for a one year bet? That would be unambiguously collectible on both sides?

**Bret** 03:20

Well, this is, in its own way. Exactly the same question as the last one. Yeah. And what I would say is, I think we all ought to be quite frightened about the fact that what is actually true, does not necessarily come to dominate the narrative. And I'm watching this I've watched it now twice with lab leak where lab leak was officially portrayed as nonsense. And then the official story made a transition for no obvious reason, there was no new information. And now it's going in the reverse direction, where people are feeling emboldened to challenge it again. And the problem is, this is not evidentiary. This is something about, you know, some team sport in which ideas rise and fall having nothing to do with what the evidence points to. And so anyway, I don't have any confidence that we will ultimately have the story and that thereby, if you bet in the right direction you will collect. Right, and you know, that's a huge red flag. If we can't figure out what's true, if we cannot, you know, upon discovery of evidence of something, lock it in so that we cannot be made to forget that it existed, then we are in serious trouble.

**Heather** 04:36

We are but do you like I'm I admit that I'm just kind of fried at this point. But I don't think there was an operational thing in there.

**Bret** 04:44

No, that's the point. Yeah. And my point is because there is no obvious way to bet so that you aren't clearer insight or failure of it can be manifest in gains or losses. That tells you where we are. We're in pure narrative land.

**Heather** 05:00

I guess this isn't an answer but apropos something that we've talked about in the past and that you in particular have have spoken to in a number of places keeping yourself honest and keeping your interlocutors calm, honest, by yourself writing down what you currently think and putting it in something sealed and dated, and asking them to do the same. And you know, in terms of a bet, maybe being like, okay, we're going to, like we're going to, we've got these things and we're going to give them to a third party or you know, put them like something right, and come back to them. And in light then of whatever it is, and you don't and perhaps ask you know, yourself and the person that you would be betting with, to write down, you know, a sentence on each of the things that you think are true, and like we're being vague about what those things might be. But comparing your position now and their position now to what is what we all understand to be true in a year should be revealing, at least with regard to the lab leak and ivermectin. I hope that there will be more clarity on both.

**Bret** 06:18

Yeah, we can hope and, you know, that's why we are taking the risks that we're taking is forced the conversation to reveal what's going on. And you know, frankly, it worked with lab League, and then it sort of is unworking right it's it's an amazing and amazing fact,

**Heather** 06:35

with at least with ivermectin precisely because you made this point but I wanted to circle back around and just like hammer but you made this point in the first hour in the first two hours. That you know, the the the vaccine only and for everyone, people are y'all actually like really speaking from weird privilege, like it's it and you said Americans, but I was thinking like, I think berlinski is in Europe and lemons in Australia, and Dagon is in Russia, and that's weird ish. But you know, so this, this, the privileged place of the effectively Western, educated, industrialized, rich democratic world, that is going to have access to the vaccines is, is showing like all yalls privilege is showing when you imagine this, that the ivermectin needs to be quashed and mocked and you know, no off label you should ever be used when, you know, people in Yogyakarta and Timbuktu and teyonah. And you know, all these other places may not have access to your damn vaccines. And they could have access to ivermectin in some of those cases, they already have had access to ivermectin so

**Bret** 07:49

well, but so I think the privilege thing is right. But the other point is, you're actually shooting yourself in the foot, right? If you want vaccines to create herd immunity, sufficient that you can go back to your regular life and not worry about COVID, then you need to worry about all the people who can't get it or won't get it. Right. Yeah, so the point is, it's not even it's not a privilege. That makes sense, right? There's privilege, that's obnoxious. Yeah, that's toxic. But that makes sense. When somebody you know, I mean, from like, a selfish perspective, right? Make sense? If you know, if the school your kid goes to is great. And you happen not to be moved by the fact that the kids, you know, in the next zip code over go to a crappy school, that's gross. But it makes sense. It does not make sense for you to be pushing for herd immunity and telling people they're bad for not getting vaccines if your plan, even if it got to everybody that you're reaching would not drive this thing extinct. Because the point is, you're still gonna be, you know, on this in this situation where we don't reach herd immunity, it doesn't go extinct. And so then

**Heather** 08:54

because it's not reaching all these other people, right, don't have access to the vaccines. Absolutely not. You're not just talking about the because the vaccines themselves imperfect, again, a term of art, but because right won't reach

**Bret** 09:03

a lot of players, even if they were perfect. Yeah, we'd have this problem. And so the real the real point,

**Heather** 09:08

even a technically perfect vaccine needs to be needs to get to 100% of the people. Well, no, it needs to get to whatever it needs to get to a

**Bret** 09:16

large fraction of the people. But and so this is really you know, if there's a difficult but really important message, it's that if your position is ivermectin doesn't work and these vaccines are great. That sounds like talking points on somebody's presentation. That does not sound like a natural position. Yeah, right. And you should ask yourself, and I followed that position to its logical conclusion, would I be free of COVID, two years from

**Heather** 09:41

now and that, you know, I think, I think that partially explains why we are in fact seeing ivermectin being used, you know, somewhat surreptitiously in some what not, then countries that have, you know, plenty of infrastructure and such but Don't have as you know, places in countries that are poor and and perhaps just don't have the wherewithal to bring the massive vaccination program in. Yeah. And yeah, it's just it's more expensive and everything's alright. If you took the Vax while also taking ivermectin, would the Vax be effective?

**Bret** 10:25

That is an excellent question that shows that whichever student this was, has been paying attention.

**Heather** 10:31

Here she shares a name with one of our students with several of our students, actually. So maybe

**Bret** 10:34

all right, awesome. Awesome. Here's what I would tell you is, we don't know the answer to that question. And the reason that we don't have the answer to that question is because there are multiple mechanisms of action that appear to be involved in the effectiveness of ivermectin. And I think the question hinges on whether or not binding spike protein is an actual important effect of the drug, which it may well be that would explain,

**Heather** 11:00

there's a there's a paper that finds that but if I remember correctly, Dr. Malone was not compelled by it. Yeah,

**Bret** 11:08

I think nobody is certain. And because nobody is certain. Is specular speculative. Now, certainly somebody should figure it out.

**Heather** 11:16

Well, I mean, there was a paper that came out well, but what we need is, I believe, not

**Heather** 11:22

like there's no work that's been done. It's not like someone's just being like, Oh, I think it might like, well, there was work that was done, it was published,

**Bret** 11:29

my would have to go back to it. And to figure out why it is not regarded as conclusive. It's possible that it is stronger evidence than I think. But anyway, it is possible that it Biden's to spike protein, it is possible that it doesn't it clearly has at least one other mode of interaction or mode of action and possibly more. And actually, that's one of the fascinating things about many of these natural compounds. So things often have many effects. And why that is the case is worth exploring. But that it appears to be the case you know, that a an anti parasitic drug appears to have anti viral action is in and of itself. Fascinating, right? Why, you know, is that a lucky coincidence? Or is there some deep story about the molecule in this soil bacterium that is interacting with multiple systems in the soil that would explain that naturally would be wonderful to know that natural history story? And I'm pretty sure we don't Yep.

**Heather** 12:34

Yeah, but I mean, I think you said this. If it does, if ivermectin does bind the spike protein. And you're on ivermectin, when you got the vaccine, it's likely to render the effects of the vaccine, it's likely to neutralize them, at least largely both the positive effects on the negative effects. So potentially, I think that if if ivermectin binds the spike protein, that taking the ivermectin leader, after the vaccine has had a chance to do it's at to have its good effects. could potentially clear any remaining spike protein that was in your system.

**Bret** 13:20

Yeah, if it works that way, if it works, and if we were to able, if we were able to nail down that it didn't work that way, you've had no interaction with the spike protein, but did positively affect health in terms of post vaccine syndrome and things like that. You could imagine a world right if you if you showed that it allowed immunity to develop, but successfully blocked some of the harmful effects of vaccine then it could actually compensate for some of the defects of these vaccines. Wow. Yeah,

**Heather** 13:52

synergistic.

**Bret** 13:53

Right. So the point is, what do you want to know? Yeah, I do. Yeah.

**Heather** 14:01

I do. What are your thoughts on the insanely disproportionate lockdowns in the UK and Australia where most people vaccinated and cases and deaths are low? Well, yeah, to the degree that the lockdowns are, are persisting or I think in at least I think the UK they're persisting. here in Oregon, we're finally open. Like just wells up not that long ago, but in Australia, I think they came back right, like Australia is now in winter. And they they, they went back into lockdown. So I want

**Bret** 14:36

to take this opportunity to make two points. Okay. One, there is, I believe genuine reason to worry that certain restrictions are being used for social reasons, not for epidemiological reasons. And you can point specifically to all of the instructions about using masks out doors, right? That was nonsense from an app. Give me a logical perspective. And it should not have happened and we don't know when lockdowns are being used for some reason that has nothing to do with epidemiology. However, epidemiologically speaking, we are playing a very dumb game, right? we impose restrictions, and then rates begin to drop for whatever reason, we relaxed the restrictions, and then rates begin to climb. And the basic point is, our sub f needs to be below one and stay there long enough to drive the the pathogen to extinction. And if you could do it locally, if you could do it in your state, right, that would be an accomplishment, it would not be a permanent accomplishment if the next state over didn't do it. But let's say one state got good at this, let's say Oklahoma decided, you know what, we're sick of this, we are going to come up with a regime that actually successfully drives it to extinction or near extinction inside of Oklahoma, and then we're gonna hope that Nebraska notices, right? Something like that. It'd be easier if Hawaii tried it. Hawaii has a better, better shot, can wag its finger at people at the airport, for example. But But there is a problem in that our sense of relief, you know, it's like somebody who diets and when they see the number they want on the scale feels like a Eureka, and then they go eat and it's like, Well, okay, so you know, it's gonna be that Yep. Yep.

**Heather** 16:31

Do either of you have any updated insights on the Novavax vaccine? I hear, I hear that it's good that it could be safer. Do you have any outstanding concerns? You know, I don't I don't know. I have not looked into it recently enough to have a sense of,

**Bret** 16:48

I've looked into it. Yeah, I would say, a priori, it looks better. There's one way in which it's clearly worse, which is that it's newer. So we don't know, right? We know less about how it works. On the other hand, how much we actually know about how the current vaccines work is debatable, because in some sense, we're not collecting the data in a systematic way. And we're fighting over the data that we do have and what it means. Yeah, and so it's very hard to compare, I would point out that the term safe is a problem. Because safe, you know, if you go back through the logic that we've talked about here on the podcast, safe and doesn't do harm are two different things, right? The unloaded gun may not do harm if you pull the trigger while pointing it at yourself. But it doesn't mean it's safe to do it. Right. So that distinction means there's one way in which the Novavax vaccine can't be safe, because we don't know what its impact is. And it has the same critique that we made of these other vaccines early on, which is that we know nothing about their long term effects. That said, I do think one thing that we should be hoping for, is a traditional vaccine that works against COVID. And is perfect. And one other thing that I never hear mentioned, just never hear it is what is the opportunity cost of vaccinating people with the current imperfect vaccines? What does it do to our ability to induce a better immunity later with a different vaccine? Maybe it doesn't interfere with it, maybe we are actually signing up for a prototype and the thing downstream, that's much better becomes not very useful, because vaccinating twice has some paradoxical effect. I don't know. But I'd at least like to hear that conversation.

**Heather** 18:37

Well, I mean, among the vaccines that are available now, I've begun to hear it recommended by various health agencies, that that it both that you can mix it up, and in some cases that you should mix it up, and I haven't seen the explanation for why they think you should. But it would seem to me that that logic should be generalizable, should be generalizable, if it is true that I'm taking one dose of Pfizer and a second dose of excuse me, Madonna, or JJ and then topping off with Pfizer, you know, whatever it is that people are recommending, if that actually might confer greater immunity than either of those vaccines alone. That that also suggests that there's not a greater safety problem from doing so. But again, the data are so fucked up that how would we know?

**Bret** 19:30

Yeah, but the problem with that is that all of these vaccines as different as the two mRNA vaccines are from the dino, vectored vaccine, they all function on exactly the same principle. Yes, right. Yeah. Because they all function on exactly the same principle. It's not a good test of whether or not we are limiting our future options. Yeah, that's true vaccines. That's true.

**Heather** 19:52

Okay, what do you use ivermectin prophylaxis over vaccines and trying to have a child to get pregnant So you know we we are not doctors and we are not providing medical advice. If I was trying to get pregnant, I would prefer the ivermectin this does raise a question about this paper that we've been hearing a lot about that we were going to try to get to in the first hour that maybe we should talk a little bit about here. I want

**Bret** 20:29

to do that. I want to say one other thing first, I believe we are having a what's the word? I don't know. Maybe it's a parallax situation where we got multiple things impacting the current sense of where we are pandemic wise. And it is obscuring, the things are overlapping in a way that makes it hard to know where we are. That was a very unclear way of saying, hey, check this out.

**Heather** 20:57

Start again, hey,

**Bret** 20:58

this, I check this out. The fact of the vaccines is clearly having an impact on how many people are coming down with COVID. At the same time, we are having an unprecedented year, where people have been locked up afraid cooped up in their houses, hanging out with the same people. Summer is here in the Northern Hemisphere where most humans live. People are clearly enjoying being out and about and not wearing their masks outside. And it's a whole different world out there. Right? That takes us if this is any, this is exactly what we've been saying on this podcast, which is most of the world because it's Outdoors is safe. You should be spending time there. You should be socializing there, you should be doing everything you can to get as much normalcy in the outdoor environment as you can, right? People are doing that now just instinctively, right? Okay, summer is not a forever phenomenon, right? And so the fact of COVID being much rarer at the moment is the result of two different things. And we don't know how to separate them because they're happening at the same moment. What does that have to do with pregnancy? what it has to do with it, you're gonna love this because it actually connects is crazy. Like don't do the lock downs question. Now. here's, here's my point. If I was if I identified as a woman sufficiently strongly to get pregnant and produce an offspring,

**Heather** 22:23

oh, no. Okay, game over. I am leaving now.

**Bret** 22:27

I'm sorry, it's late. Stop. Okay, where I woman and were I to get pregnant now. I wouldn't probably do either. I would behaviourally isolate, so that we especially because first trimester fetuses are so much more fragile. That my sense is that you could behaviorally protect yourself really, really well. And it wouldn't be easy or fun, necessarily, but it's a short time window. And that if you had to do something downstream, I would, if it were me, I would probably also choose the ivermectin because it has we have better safety data. But it's not conclusive for for fetuses. But nonetheless, this is never on the table, right? We are always given these weird, stupid binary choices. And the answer is actually producing a child's you know, if not the most important thing you will do in your life, it is among them, right? You should take it very, very seriously and have radical behavioral modification in order to protect yourself from COVID without introducing something foreign into your early pregnancy is a possibility for you based on how your family functions where you live, whatever I would do that, and summer is a particularly good time to do it. Because contact with COVID is comparatively rare, because people are outside. Yep, yep.

**Heather** 23:58

Yeah, let's save the discussion of that article. Okay. For next time, so we won't, we won't have this clip, but we'll just say that there's there's this Zack which you can show briefly. Article preliminary findings of mRNA COVID-19 vaccine safety in pregnant persons, which has been circulating for a little bit and has gotten a lot of people very hot under the collar about what it appears to suggest about what it appears to find an obscure about risk to pregnant women's fetuses in the first trimester when vaccinated. And we had never said anything about it because we'd never read the paper, right? So I finally read the paper in preparing a response to the Colette article. And basically those people who think this is, you know, vaccination ending level results are wrong if they've misunderstood What's going on here? So it's,

**Bret** 25:02

yeah, there's a confusing element. And there's a there's

**Heather** 25:05

a, they have confusingly communicated some things in this paper. But the people who have imagined that they found some smoking gun with regard to extraordinarily high miscarriage rates post vaccination are wrong, they've also done some bad math. So we'll just leave it there for now. And go back to the next question, say,

**Bret** 25:30

which means we don't know the answer. I should point out

**Heather** 25:34

with regard to whether or not there, you know, we don't have a signal at this point with regard to save the vaccines or don't have a clear signal. We don't have a signal. Yeah. What are your thoughts on the finding of graphene oxide and the mRNA vaccines?

**Bret** 25:48

Well, my sense is, this is a case where something extraordinary was claimed, I think on the basis of a single vial that was claimed to be analyzed. And then there has been a claim that the analysis was wrong. I don't know why graphene oxide should have been in there, it seems a very bizarre choice. Yeah. And so I think the answer is, in general, these kinds of claims turn out to be false. On the other hand, you and I are facing claims that we are seeing mirages with respect to the effectiveness of repurposed drugs, and other things. And so I'm sure there are lots of people looking on at kind of a distance, who think, oh, that's just crazy. That's crazy talk. And so I guess my point here really is, we live in a world in which certain crazy things are true. Many crazy things. In fact, almost all of them are false. And the job of you just eyeballing them and figuring out which ones are true and which ones are false, is it's a that's a fool's errand. Yeah. And so I don't know how we deal with the fact that you next week, we'll hear the next claim that sounds absolutely preposterous, and will almost certainly be wrong. And then, you know, to the extent that you take the well, if it's almost certainly wrong, I'm just going to assume that the people saying it or not, and then people point out at people who aren't not right,

**Heather** 27:27

or you know, or you've got people on who, you know, are largely making a lot of sense, and maybe they've made an error somewhere and, you know, you can't it's impossible independent conversation or movement be moving through life, if you, excuse me, independently. Seriously, question every single claim made by every single person that you're engaging. Yep. And so you come to trust more those people who seem to be getting it right, more often than not, yeah. And you come to trust less those people who more often than not are getting things wrong, either because they're not very good at what they're doing, or because they're lying or cynical, or whatever it is, it doesn't matter if they're getting things wrong, more often than not, you stop paying attention. Let me stop believing them. Yep. But you know, even mostly wrong, people get things right sometimes and even mostly right people get wrong things wrong sometimes. And and we're just most of us are actually trying to do our best and, and get through this by making sense of things. And we need to be forgiving of each other's errors and omissions.

**Bret** 28:34

Yeah, I mean, as long as they're dealt with, honestly, right.

**Heather** 28:38

Okay, given the infuriating nature of what's going on with COVID and ivermectin, what advice can you give to avoid becoming cynical about humanity's fate?

**Bret** 28:48

It's bad for you being cynical, yeah. I mean, that's because it is quite possible to be cynical based on Chris, sort of a normal extrapolation of how much is wrong and how much is headed in the wrong direction? And the answer is, okay, well, what would that do for you? Well, actually, it'll be paralytic, or it will turn you into a hedonist because you'll think there's no point in doing anything else and I can guarantee you as people who have not done that, that if you imagine Well, I mean, here's what I do. I do not know of a single reason that we could not turn this around. Right I know of a lot of things that are wrong. I know of reasons to think it is improbable that we will get enough ducks in a row to actually turn things around on the other hand, you know, I remember the Soviet Union falling I know that the CIA didn't see it coming. I know that the rest of us didn't see it coming. Right. I know that we elected Barack Obama and although I was very disappointed when he did in office I also know that there was the sense of like, Okay, finally this is that new moment and And anyway, the point is surprising, interesting things has he came in To office Yeah. And you know, as I've said before, I still like him as a guy, I'm disappointed in what happened, I can't even explain most of what happened under his presidency. But But the point is, if you simply assume that until you have very excellent reason to believe it couldn't be turned around that surprising things can emerge. And that what you want to do is be well positioned to do something with them, then it will fill your life with meaning, and you will be much happier. And at some level, if you filled your life with meaning, and you were much happier, and then it turned out, we didn't succeed in turning it around, it would still have been a better use of your time. Right? So yeah, I would just take an approach like that, actually.

**Heather** 30:45

Can the mRNA vaccine cause oocytes to produce spike proteins? Are there fertility implications? No idea.

**Bret** 30:56

You know, I would have to go back to my reproductive biology. I think my instinct on that is no, but

**Heather** 31:04

my instinct is no to based on that dormancy of them. Yeah. So maybe, but if they were, if they were becoming active somehow, like, if they were if they were, if they were beginning to move and ready to be fertilized or something well, but so then I don't think so. Like we're just totally guessing. Yeah, yeah.

**Bret** 31:25

This is not information you asked us to guess. And yeah, saying, but reproductive implications are possible, because Welcome to complex system, right? Is this a likely mechanism? I'm gonna definitely look into it. But

**Heather** 31:41

both of our instincts like, probably not that Yeah, yeah. Okay. It seems to me that there is an extremely strong pressure for motivated reason inherent to Team vaccines position on safety. For someone who's been vaccinated, it's not an abstract argument, his or her body is literally on the line, I can imagine being very resistant to any conclusion that finds me have effectively poisoned myself seems like an unusually strong source of bias that might explain some of the obstinance or apathy of many otherwise smart people towards any questioning of the vaccines.

**Bret** 32:12

What do you think? So? Yeah, first of all, I don't remember what livestream it would have been. But I mentioned that I thought that this was going to play an important role. Yeah, that, that the problem, and I believe me, I actually quite strongly empathize with it. Right? Because you and I, you know, very early on, we're enthusiastic about vaccines in this case, because we thought, maybe that's the way out of this. Right. And then, you know, from the beginning, we were concerned, well, we don't know what the long term impacts were. And that left us in a position of looking at the evidence as it emerged, which, frankly, whether the evidence is what it is, or it isn't what we think it is, is scary. Yeah. And so the point is, that caused us to actually go a different way and not get vaccinated. And so the, the point is, I can vary and, you know, we were talking until actually pretty late in it, that we thought we would ultimately be forced to do it, that the risks were low enough, and that the advantages

**Heather** 33:16

of sort of wait long enough, see which one is the is the best choice, right? So we

**Bret** 33:20

thought that was gonna happen. So we can very easily imagine having done it, and then feeling like, Oh, what is that signal? And, you know, God forbid, you do have one of these bad reactions, you know, so anyway, yes, can totally imagine it. But given that,

**Heather** 33:34

again, we can't sorry, but again, we cannot trust the data that we're seeing. But, you know, if, if it's if this part, if it is true, it does seem that the most extreme, you know that there may be very long term effects, of course, as we've been saying forever, and we cannot know. But it does seem like the effects the adverse events fall off precipitously over time post vaccination. And so the longer it's better, like if you if you if you are very concerned, the longer it's been, probably, the less likely you are to end up having one of these adverse events.

**Bret** 34:07

Yes, although I don't know how to deliver this message. I think it's implied in everything that we've talked about. But part of the problem here is even if your post vaccine, and even if it went very, very well, because we are not with a vaccine only approach because we are not on a trajectory to actually driving this pathogen to extinction. However, we ended up there, the likelihood that we are going to be dealing with a never ending sequence of variants, and therefore a never ending sequence of vaccine updates. It's like a subscription service. And so the point is, if you got the vaccine, and it went, well, that's good. You probably are getting a benefit from it, you're probably much less likely to get COVID and if you did get it, it would probably be much less severe. That's good. On the other hand, the question isn't really over because the answer is, well, what happens the next time and this is why the position of the vaccines are wonderful and ivermectin doesn't exist, is so troubling is that it does not give you a tool that is potentially vital in that mix a tool that from the point of view of civilizations, well being, the evidence suggests might be a very powerful contributor to the branch of the tree that actually gets us past saris copy, too. Yeah. So I would just say, Yes, I think it is contributing. But people ought to realize, it isn't like, you know, we were more or less induced to believe it was going to be, you get the vaccine, and we're done. And that's not how it's looking. And therefore, one ought to think about yourself as sort of in one decision matrix.

**Heather** 35:54

Yep. Nice one, man.

**Bret** 36:01

I know what he's thinking.

**Heather** 36:03

What advice do you have to give others? your credibility is attacked as yours has been? We are here with you keep up the fight?

**Bret** 36:12

That's a tough one. Yeah. Well, a I will give a an observation that we have made before, which is that this is very different. When you have a reality check that you can rely on. And Reality Check doesn't mean somebody to tell you nice things. That means somebody to tell you what they see. Yeah. And so you and I have been very, very lucky that there's never been a moment in, you know, the last four years for us where we had to take the world's input as to, you know, what, what was happening to us? We were able to check it with somebody else who could see it.

**Heather** 36:50

Yeah, I mean, it's not that we haven't disagreed, like, you know, we have we have not always seen exactly the same thing. You know, start at you know, do either when no evergreen was happening, or this. And it hasn't always been easy, but you know, the, the the disagreement between us about what is actually happening and what is true and what's not and what is wrong, and what's right, is incalculably valuable. Yeah, it really is. So that's, that's exactly, that's the opposite advice, like, you know, get yourself one of those. That's, that's not operational at all, but you know, if your credibility is attacked, and you have been doing the best that you know to do, and you're operating in good faith, then you continue to know that and it doesn't make it easy, and you might end up capitulating. But it doesn't make you wrong. Like if you all if you 100%, we're doing the best that you could with the information that you had, and you were operating in good faith and you and you're sure of that. And again, it helps if someone else is watching you and be like, Oh, yeah, that okay, we didn't and that was a little bit of missed out whatever, right? Then, no matter how many people show up, and of course, the fact that it's anonymous hordes on the internet, in some ways makes it harder, but in some ways makes it easier to because it's a you know, now multiple repeated observation that people enter will are plenty happy to interact anonymously, or at least with that barrier online in ways that they would never, you know, they would never say most of those things to your face. But you should still be able to go to sleep at night going, I'm doing the best I know to do and try to figure out what is true and best for people. And, and that that is going that just helps it and frankly, trying to figure out what the motives of the other people are and you know, bad faith, are they just dumb? Like what is going on? That doesn't help as much. And you know, it's necessary to the argument sometimes it's necessary to try to understand like, how is it that such and such a person can be so savvy here and apparently not there? Is it a lack of savviness is a lack of General savviness or is it capture what is it? But the like, how do you deal with it yourself? You You be good? And then you can as you're falling asleep at night, like okay, I'm still doing the best I can. The haters gonna hate.

**Bret** 39:35

Alright, two more things on this topic. I think one one is always caught it one has to be honest with themself in order to navigate the following difficult puzzle. The puzzle is you take flak when you're wrong. And when you're right, yeah, and so There's this phrase that's flak over the target, right? But if you

**Heather** 40:04

but it always worries me,

**Bret** 40:07

right? That's the problem is that you can if you take that as an excuse to not listen to critique, that's a problem you will you will fool yourself. And so my point would be that the only route out of that pickle is to recognize a that flak over the target is one of a couple of explanations for flack. And to not being socially persuaded is essential. The crazier a social environment, a political environment is the degree to which you are not socially persuaded of something you were analytically persuaded dictates whether or not you can navigate those two different kinds of flack and not be pushed off of Yes, you know, truth, but the cause to alter your course when you've misunderstood something. And it is an essential scientific skill. And it is a very rare human skill because humans are so social. So we take the flack as an indicator of danger. And that translates to people imagining that it must mean you're not right when it sometimes does and often does not.

**Heather** 41:11

Yes. I'm sorry, I'm, but we've been at it for like 15 minutes or so, Zach. Really? We've been starting till 530. Yeah. Okay. Let me Here we go. Let's let's do something. And now for something completely different. Okay.

**Bret** 41:41

That's the best British accent you can muster.

**Heather** 41:44

No, I can. I could do that. But I'm not I'm not going to. Yeah.

**Bret** 41:50

And not late enough. Yeah,

**Heather** 41:52

well, after five, lots of places. Actually. It's after five exactly as many places now as it always is.

**Heather** 41:58

Wow, I know. That's huge. Yeah, so not deep.

**Heather** 42:03

Are there any updates on unity or plans for 22 political action by you? I couldn't survive the gas lightened without you too much love. I love this

**Heather** 42:12

term. Yes. Lighten meant Good work. So gas lighting.

**Heather** 42:15

Yeah. Job citizen. That's our friend. Job citizen.

**Bret** 42:18

Yeah, yeah. Trap citizen. Yeah, yeah, chops salad is what I always hear. And then I catch up to Trump citizen. Yes, there's stuff afoot. Not ready to reveal it yet. Stay tuned and prepare for a broadening of your understanding of unity, because it's very easy to overgeneralize from the first instance of something you've seen, and, you know, the mission has to be bigger. Oh, this is exciting. Yes.

**Heather** 42:51

Okay. Enough, I can't I'm not gonna do it now. No, normally No, I do it. Nope. The mainstream opinion is that neutering your dog will keep them healthy. and healthy. Reviewing the literature suggests the opposite. That removal of the testes or ovaries multiplies the risk of some chronic diseases like bone cancers and diabetes. I am planning to adopt a dog soon and hesitant to have him neutered. What are your thoughts?

**Bret** 43:18

This is a complex one.

**Heather** 43:19

This is very complex. I mean, it it is true, then, of course it has all the facts.

**Bret** 43:26

Right? Yeah. in both directions, in both directions

**Heather** 43:29

in both directions. And it also has behavioral effects. And for the boys for the for the boy critters. Larger those behavioral effects upon neutering are ones that people prefer, yes.

**Bret** 43:42

makes them more manageable,

**Heather** 43:46

I guess. Could you not?

**Bret** 43:48

Yes. Okay. So I'm sure that would work with humans. But we don't we don't do that. Right. Yeah. Now in seriousness is a, you may not have a choice. Because the manageability of your credit. Yeah. Be. I think the calculation isn't really a longevity calculation, although I'm actually not convinced. Yeah, that if

**Heather** 44:13

you manage, let's say, there's no suggestion of longevity here.

**Bret** 44:17

So in a male critter, the removal of male test tendencies, by removing the testes could have some positive effects on longevity, right? Yeah. On the other hand, it could also have some like weight increase, which would have a negative impact on longevity. So I think it isn't a simple question. Yeah. But the real issue is, you know, at some level, if you step outside of this, and you say, Well, I'm going to get this animal. I'm going to provide this animal with a wonderful gift, which is a life as free of worry as any creature gets to experience and it will not be an infinitely long life, but it will be an excellent life. And I'm taking responsibility for the animal's well being throughout that life. And you know that some level one has to, you know, does having a sexually intact frustrated animal serve the animals interests? Not necessarily so we think about the calculation that way. And Yep.

**Heather** 45:27

Good. Can you identify and explain the key skills, public education has not distributed now contributing to our collective sense making challenges. At one level, I was thinking maybe we should just punt this to the week that we're talking about school and education when we're talking about our education chapter. But if you've got a list right off the top of your head,

**Bret** 45:51

I mean, I think it comes down to two things, two things to write. And maybe they're even one, the one would be first principles thinking, which it turns out, even people who seem to do it local to one set of questions or topic. Yeah. don't always do it across the board and don't know when they're not doing it, which is very dangerous.

**Heather** 46:12

There's a related phenomenon. So I don't want to derail you, but there's related phone phenomenon I think of like, Oh, I saw something different or uncomfortable early. And so I'm heterodox and and now I view myself as one of the heterodox people but it turns out that that was either an accident, a lucky accident, or I'm really good just in that domain. But I don't have any ability or interest in actually challenging orthodoxy in any other domain, but I'm still gonna claim the mantle of heterodoxy and kind of stand here and be like, well, I'm heterodox and I know that those people are being crazy now because I as a heterodox person would clearly see heterodoxy as valuable wouldn't die. And so if I don't think it's valuable, it must not be heterodoxy. Yeah. So there's that little like, trick that people are, are fooling themselves with it is

**Bret** 47:04

true, and you know, you do one thing I thought to say, but then forgot during our main discussion, was that crisis reveals everybody's character. Yes, this is one of the big lessons of evergreen.

**Heather** 47:17

So with regard to education, you said, you think it comes down to two things that might be one yes, principles, thing, first

**Bret** 47:22

principles thinking, and then the one that might be rolled into first principles thinking but I believe deserves a special highlight is extrapolation? Right, what I find is that sometimes it's possible to

**Heather** 47:34

get no I think, I think that's, it comes second. But,

**Bret** 47:40

yeah, and the and the madman experience of, okay. You've seen this thing. We agree on what it is. Now extrapolate. And it's like, now, I don't know what you're talking about. Yeah, you know, I can't. And it's like, Look, that's the problem is that in order to figure out what's going on extrapolating responsibly is

**Heather** 48:05

key don't extrapolate into like, the visual that I got in my head. When he was saying that was actually it was like, zoom in, zoom out, like extrapolates like a lateral like, now apply that thing to that thing of a similar scale, right. But there's also like, a scalar extrapolation that is necessary of like, can you having figured out something at this scale? Can you ever move across scales? Can you go to this level or for closer in, and we all may have a place where we are best, I'm not sure that's true. But we all may have a place where, you know, you're given no constraints at all about what we might be thinking about and trying to solve problems. And it would be that scale over and over and over again. But extrapolations like lateral moves across domains. But scalar extrapolation within perhaps the same domain going from the micro to the macro, and, and in and out, is another thing that people seem to have. Many people seem to have a very difficult time with.

**Bret** 48:58

Yeah, I like it. It's one it's one type of extrapolation that you get good at, it reveals a ton of stuff. Yeah. There's one that we've talked about, scientifically, which is if you can find some process in space that has an analogue in time, and vice versa, yeah, right. That's a good one. And then there's the one that we started the main livestream today, with, which is, if you can see that with a television, it's not the fact of the television, it's the business model that creates the content. And then you can say, oh, and applies to my phone, and that applies to porn. And does it apply to pharmaceuticals? That's the question, right? And once you've seen that, and then and then the next time you see one of these realms, you'll know how to at least start not from zero but from a is this one of those places that Yeah, yeah, yeah. No, that's good. That's good. Okay,

**Heather** 50:00

I'm not sure what this one means. baffled why the organ transplant specialists aren't willing to investigate ivermectin, as Johns Hopkins study is showing 17% effective with vaccine. Maybe that means organ transplants are 17% effective with vaccinated people without having the comparison number. I have no idea what to make of that. I don't know if that's what that number means. And I don't without a comparison number, like how many organ transplants are affected without the vaccine? I it's not that high? I don't think so.

**Bret** 50:30

No, I think it's way above 70. I mean, I guess it depends what we're talking about.

**Heather** 50:33

No, I didn't mean it's not that I met it's, you know, it's not like organ transplants are 100%. Successful, right? I assume it's a hell of a lot higher than 17%. But again, I'm not even sure I'm interpreting,

**Bret** 50:43

right. I don't get I don't get the relationship. Yeah. Are they saying that for vaccinated people? organ transplants are more effective given ivermectin, I can't figure out what the Connect Yes, yeah.

**Heather** 50:57

How can we separate adverse vaccine reactions from the noise at this point, if we are being told that every adverse effect is not probably vaccine related? How can we find out?

**Bret** 51:06

Well, this is actually this is the kind of thing that a high quality analysis revealed. That's precisely the kind of thing

**Heather** 51:14

I mean, that work that I was talking about in the first in the main live stream with regard to the deaths that happened after adverse reactions to vaccines, none of which were the first 250 deaths, none of which were attributed to the vaccines, all of which were attributed COVID. That work was extraordinarily carefully done. And that's exactly, you know, I didn't want to leave the methods very conservative, and it was very conservative. And that's how you, you that's that's the kind, that's what you need to do, you know, you need to be conservative in your, in your analysis and your results. Well, so Well,

**Bret** 51:47

in this case, we have a complex puzzle, because what we're talking about is, is the signal of hazard strong enough that one should put the brakes on a process that has a known upside. Right. And so the question of what is what does conservative look like? Does conservative look like being very careful and not deploying the vaccine until you're very, very sure it's quite safe? Or does it look like not impeding the distribution of the vaccine until you're very, very sure it's harm?

**Heather** 52:21

I wasn't talking about policy proposals being conservative was talking about research. Right, right.

**Bret** 52:25

Well, but the point is, you can do this in the analysis. And you can say, this analysis erred in this direction for this reason it is these cases and in fact, that analysis did it. It said here, we've got a bunch of cases in which we have uncertainty, and then we've got these cases in which it's very probable that these are the result. Right. That's right. And so anyway, that's the right way to do it. And then you're right, the policy layer goes on top of that. Yeah.

**Heather** 52:49

Yeah. So I mean, it's it's doable. We have we have in the methods, you know, it's gonna sound glib, but it's called science. And there's just unfortunately, a lot of stuff that's not science that's being you know, painted with the word science and tried it out in some kind of science

**Bret** 53:02

of marketing, right? in sciences, clothing. clothing.

**Heather** 53:06

Yeah. Yeah. Yeah.

**Heather** 53:10

Watching question, Are you concerned about the permanence of blockchain in relation to Odyssey it being impossible for users to remove their own content?

**Bret** 53:19

It's an issue, one can remove content from active from it being found? I'm more concerned about this, not from the point of view of people like us who are putting content of a normal sort, but that if you know, I think it's the point Eric makes very clearly, if somebody docks is you, for example, right? And they put content up, that shouldn't be up because you have a right to keep your address private or whatever. The fact that it could be resurrected by somebody is a real problem. And I do think, you know, we ought to talk about those cases where something that we all agree is not somebody is right to put up can't be removed from the web for for blockchain reasons. So yes, it's a it's a real question.

**Heather** 54:06

Yep. Okay, um, for for last questions, none of them about COVID. Yeah. Can you believe it? Jordan Peterson, discusses that spirituality evolved with humanity and is essential. What do you think?

**Bret** 54:25

Yeah, you got to define terms a little better, but I think we agree with with his point, right. And so the question is, yes, it's essential. Does that mean a spirituality of a named kind? Does it mean somebody can invent a replacement does it mean you know, I would argue

**Heather** 54:42

doesn't mean it's essential for every human being right.

**Bret** 54:46

But to the extent that we don't have a spirituality, which is up to date enough to deal with modernity, we are in a damned if you do damned if you don't situation and the question is, how do you bootstrap a something that Serves that need without putting us in conflict with each other because, you know, my god disdains your God or whatever. It's an it's a vital question. Yeah, one of the most vital questions. Alright.

**Heather** 55:17

lovely to see you too again, what happened to privacy cannot make a comeback. Which animal is the most private? Thank you for being here. That was one question. Yeah.

**Bret** 55:30

What happened to privacy? It got curb stopped. While we were busy looking at our cool new phones.

**Heather** 55:39

Yeah. Yeah, that was the phones. Yeah, it

**Bret** 55:42

was the phones. We bugged ourselves. Yeah, we booked

**Heather** 55:45

ourselves. And then some number of people invited Alexa bugs in such into their homes. And yeah, putting up the cameras on streets and

**Bret** 55:54

problem with the privacy question for animals. Yeah, is that it would be possible to succeed in answering the question without delivering anything satisfying by picking some incredibly solitary animal. Yeah, we could get somewhere near something interesting with Wolverines, which are why wide, far ranging

**Heather** 56:15

giant home ranges drying home or distinction between a home range and a territory being the home ranges, all of the geography that you ever cover your territory is that part of the geography that you've recovered that you defend many organisms? Everyone has a home range many organisms don't have territory's Yep. And I don't remember actually. What all is the story? If like male Wolverines are also territorial or females are also territorial or they really aren't at all except maybe during mating season

**Bret** 56:42

Yeah, I think very limited towards her territoriality my very limited it has to do with winter carcasses that their niches very heavily focused on things like a moose who has died somewhere and so ranching so

**Heather** 56:55

there's just like there's like carcass territorial it's not even like you know wherever the thing died they're going to defend that thing for until it's until it's meat is gone

**Bret** 57:03

right something like that. Yeah, I will say the problem is it is private privacy mean totally solitary or could it be Mike might one of my favorites when we go to to the Amazon? I remember the Amazon you remember the Amazon deal? Remember the night monkeys? Yeah. Night monkeys and amazing creature. Our mother What are your favorites there? I really like the old monkeys and the owl monkeys. They're monogamous and they live in these little holes in trees. And you wouldn't think anything of it to look at the hole when it's daytime in there. There's no activity, these animals as the only nocturnal, the only anciently nocturnal monkey. There's a monkey that has driven nocturnal hunting. But this is the only one that and

**Heather** 57:51

there are a couple of other primates. Yeah, lots of simians. Yeah, and we don't we don't use the word persimmon anymore.

**Bret** 57:57

Well, I apparently still Yes, among the pro simian primates, like lemurs and things. So what am I supposed to do?

**Heather** 58:07

I know that on semi privates.

**Heather** 58:10

I can't remember it's a it's a look, I'm gonna call them I can't remember. It's the flight. It's at the haplo riser strips or I can't remember. I can't remember. Okay.

**Bret** 58:19

So among the what we used to call the, we'll use to call the simian primates, right, the lemurs and tarsiers and bush babies and all that stuff.

**Heather** 58:26

And the problem actually, I think, is the tarsiers. If the tarsiers jumped clades they they're out Yeah. Now we are understanding where the Bears Ears are jumped and that just threw all of our naming system into Not only this, aren't you? We're hoping for it right?

**Bret** 58:39

So not only did our understanding of where the tarsiers are jumped but the tarsiers themselves jumped it's what they do best

**Heather** 58:45

Yeah, they do that really really really well. And they don't even know all the chaos that they're creating over. Oh, God look primate systematics land.

**Bret** 58:52

They have no idea they would be quite delighted if they knew but they don't know. Yeah, they're gonna private. They are a little private. Yeah, I mean, all nocturnal creatures. Almost all nocturnal creatures are a bit private.

**Heather** 59:02

Oh, is that just our diurnal bias like they're private? We never see

**Bret** 59:05

them Nope. I know the answer to this one. A large fraction of what drives Nocturne ality is crypsis

**Heather** 59:13

Yes. Because light is cheap. And so the medicine a couple weeks sleep chapter. There

**Bret** 59:18

we go. Yeah. So anyway, the point is, there's a tendency amongst nocturnal creatures therefore to be things are falling in the other room, too. Thanks. I

**Heather** 59:30

can only be done on a skewer.

**Bret** 59:32

Anyway. So I would say there's something very lovely about our monkey privacy, because they huddle in their little tree hole together with their family and then they emerge you know, if you go to their tree As night falls, you can actually watch them emerge and it's very predictable. Very hard to get a picture I will tell you, but very predictable. Oh, hello. And anyway, so that they are are very private, in their own way. But they are private together. And

**Heather** 1:00:04

yeah, it was cool. It was cool. All right.

**Heather** 1:00:09

We got two questions about food. And next week's chapter from hunter gatherers guide is the food chapter. So let's just get a jump on talk a little bit about food. And then maybe, maybe we'll encourage, each week I wanted to say like, we're going to prioritize questions about whatever topic was from the book this week. But there's been a lot of other stuff going on. So there has been other stuff going on. But yeah, so actually, we're gonna answer one of these next week, I will forward the other one. So that will definitely be answered next week. Okay. So the traveling with the severe food allergy, especially the language barrier we're going to start out with next week is my foreword that I'm saying that out loud that if it doesn't happen, we'll know there's a problem in the system. And I will get back to it. But we're going to finish on. Do you have any thoughts on seed oils and xenoestrogens? In the modern diet? seeking info on these just made me feel crazy? Thanks. Yeah, so this is this?

**Bret** 1:01:07

What I'm, I'm at a loss on this one. Oh,

**Heather** 1:01:11

well, so I mean, seed oils, you know, avocado oil, coconut oil, and all of this. And then, boy, xenoestrogens, or things like soy, basically. Yeah. And

**Bret** 1:01:25

it's got a question.

**Heather** 1:01:26

Yeah, he has a question. We never answer his questions. I mean, the short answer is, the less processing that was done to move it from a food an organism that you would recognize as an organism into the food that you're eating, the more likely it is to be relatively healthy for you to eat. That's not a perfect answer. Because, you know, sugars, for instance, just just aren't good for us. And, you know, sucking on sugar cane is better than putting sugar in your coffee. But it's still just not not good for you. So the some of the xenoestrogens do seem to be able to go through an urbanization process in our bodies and thus have hormonal effects. And, and that's not a great thing, but it seems pretty to be a pretty what, you're just what?

**Bret** 1:02:30

There's a great joke here, but I can't make it without getting canceled.

**Heather** 1:02:35

You're cancelled, you're gonna get canceled out over a

**Bret** 1:02:39

sci fi joke if I pointed out that your claim that seed oils can aromatize causing hormonal effects and that suggests that they could become trans fats I'm done right if I said that out loud. Yeah, yeah, I'll be done I'd be canceled Yeah. Even though I don't think anything there's nothing offensive about that joke nonetheless I will be canceled for it so that's why I'm not saying it out

**Heather** 1:03:05

loud saying out loud Yeah. Yeah, I mean, I guess you know, so the other food question I think we can riff on forever and I probably should have taken that one given that we're really tired right now um, I don't I don't have a great answer i think you know, even so olive oil has been in culinary production for 1000s of years it seems avocado oil has not avocados have been eaten for a very long time. And so you know an avocado is an awesome thing. And olives are an awesome thing and turning olives into olive oil and using that to cook with with it's 1000s of years old history is almost certainly awesome but then what a few years ago we're starting to be told well you know olive oil has too low a smoke point you don't want to be cooking with you want to be cooking with avocado oil instead like like well okay but in order if in order to get that smoke point up you have to mess with it a lot and you have to do some fancy things in your lab I don't want any part of that I'd rather cook more carefully and you know I'll use butter for God's sake. Key right? So you know we we use actually a combination of you know, olive oil and coconut oil and avocado oil and butter those are pretty much yet to cook with and you know I always save the fat from bacon and use that whenever you know if we have it cooked in potatoes or eggs or something and that's just you know, free flavor right?

**Heather** 1:04:29

Bacon This one's like bacon

**Heather** 1:04:36

but I guess that's it you know the higher heat to which has been processed. And if it is claiming that it's you know, it's you can cook it at a higher heat than you can other versions of the same species oil. It's probably it's probably had some stuff done to it that is rendering it a bit more dangerous.

**Bret** 1:04:59

Speaking of danger,

**Heather** 1:05:00

Thank you I think he's now seeing himself in the screen and wondering what is happening well that was ridiculous answer but

**Bret** 1:05:11

I think your your rubric is is right. I'm definitely going to look up a connection between the seed oils and the estrogens and see what I can find out but alright, we there I think that's very long.

**Heather** 1:05:32

Yeah I think we're there so we will be back on Saturday with Episode 88 yes and and you know, all all usual stuff. Join our Patreon subscribe to the channels by Goliath shirt. At either of our Patreon, you can get access to the discord server where there is apparently a lively ongoing conversation. You should feel free to email Darkhorse moderator@gmail.com with logistical concerns or questions and until we see you next and ongoing after that be good people love and eat good food and get outside while everyone