Your Questions Answered - Bret and Heather 65th DarkHorse Po...

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**SUMMARY KEYWORDS**

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**SPEAKERS**

Bret, Heather

**Bret** 00:10

Hey folks, welcome back to the Dark Horse podcast live stream number 65 q&a segment, we are now going to address questions with answers. hopefully there'll be a match.

**Heather** 00:23

Yes. Our dog has a question.

**Bret** 00:25

Yes. What is the question?

**Heather** 00:26

Why do only the cats get the cream at the beginning of the q&a?

**Bret** 00:31

Because the dog will put up with not getting the cream. Oh,

**Heather** 00:35

that's not nice.

**Bret** 00:36

Not Know.

**Heather** 00:37

She gets plenty of love though. Yep. Yeah, we got a slew of cats on the back counter. Drinking cream. Right now.

**Bret** 00:46

There you have it. All right, with a short supply chain, high quality cream? Yeah,

**Heather** 00:52

it's pretty short. It's pretty short. It's, it's at least Pacific Northwest originated cows. Yeah. All right. We are going to start as we do with a few questions and comments that we didn't get to in Episode 64. Then we'll pick up a question from the discord server this week and then launch into questions from last hour before finishing up the questions from this hour. So first question, I actually have not looked at these again since last week. We're just going to keep with the same theme of today. What is the light? What are the likely scenarios going forward? If the vaccines don't work against a mutated Coronavirus? Great, great question. And I think I think this, this really should be the topic of a whole of a whole episode. And it's part it's part of where we were going with diet and activity, right? Like, change your lifestyle, such that you are in the best health to mitigate the severity of the symptoms should you be exposed. And then there are also of course, some treatments, which are different from vaccines are prophylactic and treatments are for post exposure, that really are super promising, you know, like we've talked about before here ivermectin that I think may well be incredibly powerful in dealing with some some of the effects of this disease in in some people probably not all.

**Bret** 02:30

Well, I take the question a little bit differently. Okay. Yes, there's a lot you can do to make COVID. Better, and to avoid getting it. But, you know, what, if the vaccines fail to control COVID, which I think is a real possibility, I'm especially concerned that it seems like at least the four vaccines that are out are on the horizon, all seem to target the same, the spike protein, and my concern is that effectively, what you've done is created a very intense evolutionary signal that will cause evolution of the virus in response to the vaccines. So you really have to hit them hard in order for the vaccine to deliver enough of a blow that would solve the problem. And short of that, I do expect we will see evolution in response to it. I think there's some nightmare scenarios, you know, will some of the world give up and decide to let COVID go to equilibrium and, you know, evolution will ultimately sorted out in a different way, and then some other part of the world, you know, New Zealand, Australia, places that have been successful in controlling it? Will they effectively be, you know, the elite landscape that doesn't have to live under either threat of COVID or intense controls?

**Heather** 04:00

But also no longer? I mean, then you're going to have much more closed borders, then right? You have now I mean, nothing you have now than you had a year ago.

**Bret** 04:09

Right? So I think that there, you know, there's some scary scenarios, I also think it's possible that we begin to develop a program. In other words, we may have to chase COVID. With you know, it's not like will the vaccines won't work, or Won't they work? It's like, well, maybe we need a program in which the vaccines target COVID in a coordinated way going forward, we learn from each iteration and we ultimately chase it out of existence or something like that. But I'm concerned, you know, my sense is what should have happened here is that as soon as we knew what we were dealing with, right, really had a good sense of it. We should have gone into a hyper vigilant state and controlled While it was not widespread, that it's like an invasive species that once it's widespread, it's very hard to deal with. And yeah, I hope we learn that lesson for next time. But with respect to this one, I would say, we've always got to realize as bad as this is, it can't be worse. And the more we miss manage it, the worse it's going to be. And so, anyway, I think it is worth exploring what happens if these vaccines don't work. And that That oughta spook us into figuring out, you know, the price, the price only gets larger for dealing with it, and we should address it as soon as possible.

**Heather** 05:40

Okay, next question from Episode 64. How do we end junk science? Like junk social science and junk climate science? I've lost almost all trust in science because of these fields.

**Bret** 05:54

There's no simple how, because the institutions that award the degrees that confer scientific authority on some people are corrupt and broken. And in fact, many of these fields have forgotten how to do science. They've moved on and on, or,

**Heather** 06:15

yes, they've forgotten or they've moved on, or they have intentionally and convinced themselves, this is how it always was conflated, you know, results with process and or decided that data driven, is what science is, and always has bent as opposed to hypothesis driven. Yep.

**Bret** 06:36

So how do you rescue it? Well, you're going to need to find some way to isolate some people who know how to do science from the market forces that tend to disrupt the doing of proper science. And I don't know what that's going to look like or where it's going to be. But the first people who can bootstrap that insulation are going to have a huge advantage in the 21st century. And so anyway, that that's sort of a challenge. Yes, it's not easy to figure out what you do when your universities are compromised. But it means that having done it, you'd have a huge advantage. And there's a big incentive, therefore, to figure out how to solve the problem.

**Heather** 07:15

Yeah. Brett, this question is for you, you believe that lack of clear geographical divides that reflect political divides, would result in violence in the case of a national divorce Lexa session, please describe what this would look like?

**Bret** 07:31

Well, I don't know what this would look like is I think the point is, you have populations that can't figure out how to get along, that are not separated by geography. And so there's no natural division. So what will it look like it will look like us, you know, fighting neighbor against neighbor, which is just not an easily resolved problem. So

**Heather** 07:52

it's not an easy to resolve problem, although at a at a very broad level, very broad brush. Sort of, you know, the coasts are often quite different in politics from, you know, even 100 miles inland.

**Bret** 08:09

Yeah, but what do you do with that mean, for one thing, you know, we've seen the, the West Coast at least has demonstrated that when it attempts to govern based on its understanding of things that results in collapse of civil authority. So I don't know. Is it good if those on the coast can isolate their arrogance? I'm

**Heather** 08:38

not saying it's good. I'm just saying that there, there isn't as much intermingling of, of the kinds of political divisions that this person is talking about, I think, at a less granular level than you might think, although, I mean, I guess I would argue that actually really, I mean, since before evergreen blew up, but especially since then, the the number and diversity of people from you know, any demographic that you can think of including political, that reach out to us and say, you know, I, I appreciate your ability to have a conversation in which you don't conflate your disagreement with dislike for the other person, but also will then, like reveal two beliefs that they have, that simply don't fit the ideologies that we're told that everyone has. And certainly, it looks, you know, the complete lack of unity in the country where you know, if you if you are, I don't even want to start listing things, like, trigger people in a bad way. But like, you know, we know that we can like list Blue Team stuff, and then you can go down the list and assume that if someone believes in item one, they're gonna believe in all of them. And same thing with red team. And actually, I think at least the people who are paying attention to us and maybe that's a strong Sort of confirmation bias and you know, and strong selection here. But people are not actually nearly as ideological as as it would seem, there are a whole lot of people who are actually trying to deduce what their values are and what they think is true from first principles and saying, Yeah, you know what? This might be comfortable, but I'm pro choice. And I also understand that, you know, to a amendment to it is necessary. And yeah, I can't say both of those things at the same time.

**Bret** 10:29

So I think the question what you're talking about is the the dominant truth here, which is the exhausted middle and the 67%, in the middle that overwhelmingly agree on a nuanced intermediate version of all of these things. It's the fringes that can't get along at all. Yeah, between which there is no obvious divorce possible because of the geographic intermingling.

**Heather** 10:54

Okay, maybe maybe that's maybe maybe that's it, then. Yeah. Yeah. Okay, the next one is just a comment, that equity, and this person posits is the same as reparations.

**Bret** 11:06

Yeah, I've said that reparations, all the time and every interaction at every scale. The problem is it's not even reparations, though. It is. The theme is reparations. But from whom, to whom is not something that has been worked out. In other words, we're going to use the proxy of race, which we're told doesn't mean anything, which isn't true, but we're going to you know, it's definitely a broken measure.

**Heather** 11:39

We're going to use something we've been told as a fiction, but we're going to use it to fix a problem, which is not fictional, right problem really isn't fictional. But the Now is the thing, that total fiction,

**Bret** 11:48

yeah, we're gonna use it, we're gonna use it without any understanding of what the objective is how we'll know when we reach it, we're gonna use it in spite of the fact that game theoretically, you cannot run a reparations program inside of a classroom, right? If you want to. If you reparations are a good idea, you have to do it at large scale and distribute the costs in a fair way. You cannot do it in every conversation and every hiring committee in every classroom, you just can't do it. So anyway, it's a recipe for disaster. But yes, I think the idea is, there are harms. They are real, they are being oversimplified and used as a justification for a ubiquitous peer to peer enforced reparations program that we have not agreed to, or anything like that. And it can't help it in a disaster.

**Heather** 12:45

Yeah. Okay, final question from Episode 64. is, do you think that language has an impact on the rise of transgender transgenderism, I'm a native French speaker, and language is a Latin roots do not have a genderless pronoun like it, they assign genders to all nouns. This makes debate very different. In that there's little to none of the demand for new and non binary pronouns in the French culture, for example. This is fascinating. It's sort of a sort of a superior Wharf hypothesis take on rising politics, that your that your language may actually inform what kinds of cultural change you are you're striving for?

**Bret** 13:24

Well, I think so there, there are a couple of ways to interpret this. I think one thing that is true is if you do have, you know, gendered nouns in your language, it is clear that the fact that mesa is female, doesn't it's not really about gender in the same sense as sex.

**Heather** 13:51

It is categorization scheme, it's actually

**Bret** 13:53

an error correction for language so that, you know, you know, what modifies what it allows you to convey information more robustly, and the fact that the table is female and not male is arbitrary, it could just as easily work the other way. And so the, I think, the sense of what role, you know, how much flexibility there is may well be, you know, I agree as sort of a week's up your Wharf, meaning that your your language structures, what you can perceive, there's an implication, what exactly the implication is, I don't know, it's certainly the case that until the last time we went to South America, I don't think in any of our travels to Central and South America, we had encountered trans ideological, anything.

**Heather** 14:44

And then a year ago last month, we were in Ecuador, certainly didn't run into it. And in the Amazon, yeah. Or in or in kwanko. But in Quito, the one day we spent in Quito. That's right. There was some vd graffiti about doddering trans lives or some Yeah,

**Bret** 15:00

but by and large, you know, when we took students to South America there was of course, you know, the suggestion made that we you know that we try to speak neutered Spanish and and all of this occasionally

**Heather** 15:14

I mean, that was actually only on on the last trip I never heard right before that's my

**Bret** 15:19

point that came from Well, you know, white kids it this is not something there's not as far as we see a movement of people in Latin America trying to fix the evils of the gendered language or

**Heather** 15:34

asking to be referred to as Latin x. Right, exactly. So

**Bret** 15:37

you know, this is something that's being imposed on the situation. But you know, that finally leaking into, you know, Kito to the extent that you and I would run into a little bit of graffiti. I guess so. But that's quite new. It's it's lagging behind?

**Heather** 15:51

Yep. Okay, from the discord this week, people post questions and they get voted on in this one one for this week. What are your thoughts on homeschooling? With wokeness? Taking over public education? Could it be a good idea to form secular homeschool pods that focus on classical liberal education, with groups of parents sharing the educational load? 100% Yeah, absolutely. And we have a ton to say about this. We had a lot of homeschooled kids at evergreen, actually, mostly this was not these are not people from religious backgrounds, a few of them, I think, but mostly it was, it was this kind of thing, you know, also unschooled. Also kids from you know, Waldorf and Montessori and Sudbury traditions. And, you know, all kids in all of those traditions homeschooled and unschooled, and these somewhat alternative, private educational systems. People who had experienced those things tended to be internally motivated, and creative, and analytical and competent, and appropriately confident. And certainly there will be exceptions. And you know, I'm not claiming that it's, you know, that anyone in traditional schooling was therefore none of those things, we are both the product of, you know, some excellent and some terrible school and but all of it, you know, more traditional than any of those things. But yeah, homeschooling if if the parents have the time, and the wherewithal,

**Bret** 17:29

well, I like the suggestion here of teaming up to do this properly,

**Heather** 17:35

whatever might mean, we did wasn't school. But we did this thing at our back in Olympia, that our neighbors are good friends, Karen and Andrea. initiation, we did something called family camp for several years, where we had three and then four families. So either five or seven kids. And we basically ran each of the families ran a five day day camp each year, during the summer, so that each of the families got basically three weeks of paid childcare with, with families whom they you know, respected and appreciated. And we all played to our strengths. So you know, we, we took kids to the zoo, and we took them biking, and we took them to an organic farm one year, and you know, we spent a lot of time outside. And one of the families did theater and baseball, and one often took them to the lake. And we're teaching them swimming, and it was just fabulous. And yes, that was camp, it was during the summer, and it wasn't expected to be academic. But of course, you know, that's those are often the situations where you learn from and saying that worked wonderfully.

**Bret** 18:41

Yeah. In this case, though. There is the opening. And in fact, if our kids were younger, it would make a lot of sense at this point to do it with your to gather, to put some resources to the problem, even if what you're effectively doing is privately sourcing education that isn't polluted by nonsense. This is not only one way to get what's essential for your kids, but I hate to say it, I don't want anybody's kids to fail. But the thing that is being done to kids in regular school, both public and private at this point, is a kind of mental sabotage. It is leading, you know, feeding children conclusions that are demonstrably false and insisting that they accept them is it is going to result in a mis programming of those minds. Maybe it will, it will result in a, you know, a wonderful rebellion at some point. It could result in a terrible rebellion. Yeah, but the idea that well, Nothing's more important. And making sure that your kids have excellent tools with which to go into an uncertain world. Gathering with other parents, pooling your resources, hiring people who aren't crazy to teach them makes a lot of sense. And I would say do it and don't think of it as homeschooling, whatever they call it, whatever you have to do in order to make it legitimate in the eyes of the state figure it out. But, you know, school without garbage is really important because the alternative, you know, isn't so much unschooling, or, you know, even homeschooling which has downsides in the sense that it isolates kids and so they miss certain lessons there. But you know, ultimately, you're going to be faced with D schooling kids, you know, right we do at school. No, not only deprogramming them from what they what they get in school, and you know, better just to get it right in the first place.

**Heather** 20:48

All right. Now we go to questions from this last hour. Our friend Dave says, How cool is the green room on the real time set parentheses, you guys did great.

**Bret** 21:02

Well, the real time set

**Heather** 21:04

there under such effective COVID regulations, they apparently they were the first to the first big studio to reopen. And I asked actually asked one of the staff, how often they get COVID tested. So we were COVID tested twice in a bit like once before getting once 48 hours before getting on the plane and then once right before, and that standard, and apparently they're tested two or three times a week now every every crew members and gently cast as well. But it also means that like there's just everything is different than it would normally be.

**Bret** 21:37

Everything is everything is different. And you know, they they've cut back, obviously, they don't have an audience, they have staff members playing the part of the audience,

**Heather** 21:48

and only was all apologetic about the lack of sociality. Right. Yeah. So the greenroom, you didn't have didn't have snacks and we had we had we had a nice little spread in our dressing room, but there's no after party, there was like, there was just a lot less than there would have been normally for which there was abject apology frequently. Yeah,

**Bret** 22:04

I mean, I still I was impressed. I mean, in fact, you know, this is amazing. This is this is real time. Hand sanitizer. The my one complaint Actually, it's good stuff. It does not it's not the kind that leaves your hands sticky. It's high quality sanitizer, but nowhere on here, is there a warning not to store this with your ketchup packets. And so that's a mistake you make once I can tell you

**Heather** 22:31

to use hand sanitizer wouldn't be a little bit like vinegar, like maybe you want vinegar or hand sanitizer or ketchup on your fries?

**Bret** 22:37

Yeah, it's not like vinegar at all? I'll say,

**Heather** 22:40

I don't know, I've actually never made that mistake.

**Bret** 22:44

When you do think of this moment. But anyway, yeah. So the things are not normal there. Yeah, they are impressive. I do think that there is a major lesson, you know, here you've got a very big, important program that clearly had a conversation with itself, how can we go back to doing this under these conditions without COVID being in any way resolved, and it clearly cost money. And they clearly limit the things that they do that they once did,

**Heather** 23:16

but are looking forward to doing again soon, right? But they are

**Bret** 23:19

totally up and running. And I must tell you, there's something a little hard to put one's finger on, but awfully important our experience of intersecting with with real time. And you know, being tested twice, you don't have COVID, you don't have COVID, there was a relief, just like it's the only period of

**Heather** 23:44

two days we experienced relief like Oh,

**Bret** 23:47

don't COVID, right. It's not like we think we have COVID most of the time, but just simply even knowing for two days, well, in that period, totally free of COVID is actually you puts you in a mentally different place. And knowing that everybody that you're interacting with has been recently tested and therefore constantly tested. Yeah, you know, the precautions are really just precautions and it's not like, you know, Gee, I wonder who around here is, you know, coughing out viral particles. So the point is, look, what suppose we stop dicking around, and we said, All right, we've got a serious problem. What resources will it take to get us back up and running without creating further COVID disaster? What would it take to do what real time has done with its program and to do the equivalent for a great many things, right? And it's conceivable, it costs money. On the other hand, I think what we're doing is costing money, what we're doing is costing it's costing money without getting us anywhere. And so I would advocate that those who have figured out how to do this on some scale.

**Heather** 24:54

I mean, you know, these, I do not know the expected false negative rate on these rapid tests, but these are test, which is what they're experiencing. The the cast and crew are getting two or three times a week, which is what the the second test that we got our it's literally it's less than 15 minutes. Yeah. So, you know, depending on how expensive they are, could could that start to be deployed for restaurants for theatres, for, you know for for live entertainment?

**Bret** 25:21

Well, and you could you know, imagine that you maybe this is what you're thinking. But imagine that there was some app or something that each time you got a test that was validated. And in these cases, they were very careful to make sure that we were who we said we were so that somebody else couldn't take your test for you. And you know, everything, every sample was carefully tracked barcodes so that we knew exactly that on this moment the test is negative. And that could be something that you could opt into. And the point is, in order to do certain things, your negative test in some period of time could simply be registered somewhere such that you're greenlit for this thing, and you could you know, when you weren't gonna intersect with things, maybe you don't do it.

**Heather** 26:11

Yeah, test. That's not invasive, that's not introducing anything. And that obviously gets out of date. And you know, as soon as, as soon as you take it, but really, really couldn't begin depending on how actually accurate they are with the rate of false negatives, I guess and false positives, but specifically false negatives would be the risks to the community are and and how cheaply such a thing could be deployed?

**Bret** 26:45

Well, I think the rate of false negatives should be very, very low with one exception. So this is a PCR test, which means that it amplifies very tiny signals of viral genes.

**Heather** 27:02

And so you're likely to get a fair number of false positives, potentially, but false negatives. Well rare,

**Bret** 27:07

as others have pointed out, you may have fragments that are there long after you're sick. And so you could get false positives been exposed if you had if you had had COVID or had been severely exposed. But false negatives, I would imagine would be mostly people who are pre symptomatic. But as our friend and former student, Jeff laddish points out. the seriousness of that is relatively reduced. Because if you're in a, you know, a very early state where there's not enough of the virus to be detected by this test, you're also not highly infectious. Right? Right.

**Heather** 27:45

If you if you both have no symptoms, and your viral load is low, it's it, there may be some third way by which the thing is transmitting. But those seem to be the the likely indicators of infectious, right. But anyway, regardless, like it might be something else. But yeah, hey, we could test

**Bret** 28:03

the methodology, we could say, you know, real time and whoever else has figured out how to get their business up and running in a context where there are lots and lots of people interacting, and they need to do it safely. And you're, you know, bringing you I mean, you know, biggest danger we experienced was surely the plane. But the, the question of how to do it, and how effective that is preventing transmission and how much more effective we would be. This is one of the things I was hoping would come up last night on on real time that that we didn't get to. But the failure to get high quality tests regularly enough administered, that we could in fact, look at the the epidemiology in real time as it were, and deal with outbreaks more rapidly, rather than waiting for people to show up, you know, to get a test because they've come down with something right would be very useful. So I don't know why we're not doing this. But the fact that it can be done in small pockets when there's enough on the line tells us that there's something that we might be thinking about for civilization, that would be well worth considering.

**Heather** 29:12

Absolutely. All right, let's get a move on. We've only gotten through one question. And Zach, we're probably already at a half an hour or so. Right? Yeah, so obviously we're gonna keep going here. But YouTuber, Gary epi claims that Robert rivers endorsed his book, The revolutionary phenotype. After reading the book, I doubt the validity of its thesis, and the Trevor's actually endorsed it. What are your thoughts on this? We have not read it. We have we have engaged. We've been asked to read it. We've been sent it and we just have not gotten around to it. So I don't have much to say here.

**Bret** 29:49

Let's hold on. I certainly don't want to answer for Bob. And can't answer for myself. So yes, let's return to it.

**Heather** 29:57

Next one In a similar vein, Jar Jar Binks. His forward facing eyes on two inch fleshy stocks extending above his skull. But he walks upright on dry land seems wildly unlucky for a species one bad stumble and your blind. Could Georgia have ever evolved. This is a great question. I wish I knew more about the Star Wars universe Star Wars, right? We're joking. Yes. I was on Star Trek. I just like I think it's Star Wars. I wish I knew more about the Star Wars universe to know exactly what his you know what he's doing besides walking around on dry land, but certainly by you know, what I do have in my mind's eye and what this description suggests, it does seem rather unlikely. rather unlikely. Yeah,

**Bret** 30:39

I think rather unlikely. I mean, the real question is, can I mean, frankly, I couldn't pick Georgia out of a lineup. So I can't really speak to whether he could have evolved as I really don't, I don't remember much. But But the real question is, you know, can you come up with a plausible habitat and niche that would fit is weird morphology.

**Heather** 31:06

There is,

**Bret** 31:08

well, he's, I mean, he's really

**Heather** 31:11

low slung like that. Yeah, that's just the first image I've got if he's low slung like a, like a turtle. It's not, it's not such a problem. But yeah, so

**Bret** 31:26

I'm hesitant. I'm hesitant to say,

**Heather** 31:28

Oh, no, he's not necessarily low slung here has been written. So clearly, we just don't know no Star Wars. Like, like I said, like this. I mean, this is what you know, the the evolutionary answer to a question like this requires, you know something about the environment in which the organism is Yeah, yeah.

**Bret** 31:41

Yeah. I'm more skeptical of RTD. to having done what evolving? Yeah, more or less is an extension of the engineers who put them together? It's clearly a wheeled vehicle, one,

**Heather** 31:54

tiny wheels, tiny wheels, a few small tips over some time. I'm

**Bret** 32:00

sorry, not buying it.

**Heather** 32:03

It's like if you ever rollerbladed in the desert, it's like, yes. Doesn't work. Yeah. Again, it's

**Bret** 32:07

like the, the ketchup packets and mixing them with your hand sanitizer. It's a mistake you make once Is that what it's like? Exactly like that?

**Heather** 32:15

Okay. If next question COVID came from the lab, how much information about the virus was known by the scientist in the lab? Is it a crime against the world who have withheld any useful information about the virus from the beginning? penalty? Question mark?

**Bret** 32:31

Yeah, this more or less goes to the distinction I was trying to draw earlier, which is a I mean, look, escape from the lab could mean anything, it could mean a sample was transported from, you know, the mine in eunan. And escaped in its natural form that doesn't fit the evidence. But yeah, lovely would include that. In which case, somebody might have known exactly nothing about it other than its source. On the other hand, if this was the result of serial passage experiments and gain function research, they would have known an awful lot about it. Is it? What's the crazy out here? Is that a crime against the world? Well, I think it certainly is at the national level, if if the Chinese government prevented scientists from sharing the information they had, then that is tantamount to a major crime against the rest of the world. Again, we've got a failure of the international scientific community here if this is what happened, though those outside of China might not know for sure. But But, again, at the point that somebody knows that the virus is the result of some experiment, they have run, and it is out in the world, I think, yes, absolutely. There is a 100% moral obligation to share the information about what led to that virus so that we have the most information possible to fight it. In terms of

**Heather** 34:01

patenting basic ethics. Yeah. Basic research ethics. Absolutely

**Bret** 34:04

basic. Yeah. And, you know, I don't care what it does, do your research program, look at what COVID is doing to the world. Yeah, whatever your research program is, is not more important than that. In terms of penalty, it's a little hard to say the most important thing is this can never happen again. And that means that the incentives need to be whatever they are, what we don't want to do is create a scenario in which information that is known is not shared. In other words, if we had to trade you know if we had to effectively do truth and reconciliation in order to get the information we need in order to be maximally well armed against SARS. covi to let's do it, I really think there's a lot riding on. If this virus is well known to somebody, we need to know what they know right away.

**Heather** 34:58

The weasel clade includes many years That's a T shirt.

**Bret** 35:03

No,

**Heather** 35:04

we can't do it that we can't do that.

**Bret** 35:06

You can't do that. But here's the problem is weasels are so amazing? They really are the fact that they are that that term weasel is used to

**Heather** 35:16

Yes, sniffling I've never seen an actual weasel snuggle. They don't I mean, I've seen him do it, but they do it beautifully. They and they have pride. Yes, pride of snuggling. Whole pride of

**Bret** 35:25

weasels. That'd be a thing. Yeah, so anyway, I don't use the word weasel that way. I don't think No, I don't think you'd ever be fond of weasels. Yeah. But I get your point. Yeah, yeah.

**Heather** 35:38

Since it has been more than a year since COVID-19. cross into humans. Does the whose investigation to the origins of the virus have any realistic chance to determine the origin? Or is this just a PR operation?

**Bret** 35:50

Well, okay, does the Hoos investigation have any real chance? I don't know. I don't know that it was set up to find out certainly constructed

**Heather** 35:59

the question, right? Is Is it a, is it an actual investigation? Or is it a dog and pony show?

**Bret** 36:05

It's hard for me to imagine that somebody who wanted to know the answer to the question and share with the public would have put Peter Detrick on this panel. And it's not, you know, I am by far not the first person to point out the lack of credibility that goes along with that decision. That said, I don't think that it being a year means anything about what we can know, yes, some information has been lost. On the other hand, if I can say, you know, again, the drastic group that has been working, you know, against steep odds and tremendous resistance, has done an amazing job of demonstrating things and bringing them into the public record. And the first thing we can do is, look at what they've produced, give it an honest evaluation, figure out what remains to be known, and, you know, confront the Chinese. Look, if the Chinese had behaved as if they were innocent on this front, I might be somewhere different. I'd be saying maybe they don't know, maybe this is a coincidence, but the fact that they have behaved in a way that is consistent with hiding things, and that the evidence seems to point to gain of function research, all of the dots seem to come together.

**Heather** 37:24

Well, it's at least consistent. I mean, it's also possible they don't actually know. They just know that it's possible. Right? And that, you know, they're, they're obscuring things, just as many American research, researchers are obscuring things, because it might have been them.

**Bret** 37:41

I think that that's almost impossible. Why? Because if stars COBie two is the result of serial passage experiments, then, I don't I don't know how the person who had run those experiments could possibly be unable to identify that it was it was their monster. Fair enough. So So I think if it is theirs, they would know. And that from that much follows.

**Heather** 38:12

Yep. Okay. Some say that we have equality of opportunity already. You say not yet. How do we measure it to know either way and weed out preferences accepted the law and order? No, accepted the law and other tools not being fully made use of such as boycotting actual bigots? Seems like some will be satisfied, even if we had it that is equality of opportunity? What do people feel they still can't do in the current life in weird countries? Wouldn't a strategy personalized for individuals independent of identity solve that? I mean, this is a frequent question asker. And I think as as is so often the case, we're in alignment, the question seems to sort of answer its own question. Yeah,

**Bret** 38:55

I mean, equality of opportunity does not exist. That doesn't mean that we haven't made tremendous gains. But your zip code predicts a tremendous amount about where you'll end up in life. It tells you what your opportunities are, do people from zip codes that have a more difficult road ahead, beat the odds they do. But But if your zip code is the most important factor, or one of the most important factors that determines whether or not you will be armed with the tools that could potentially unleash your potential to innovate and get paid for it, then that is an inequality worth paying attention to, to the extent that zip codes are not evenly distributed among races, that means that you don't need actual racism to result in race having strong implications about your opportunities in life. So it seems to me quite clear, we know that opportunity isn't evenly distributed. We also know it can't be perfectly evenly distributed. Right? And what I've said before, is that what you want is the unfairness distributed randomly. Right? To the extent that it is distributed systematically, that's a problem. However, the questioners point is right, which is that, for many, even if we had equal opportunity, it would not be satisfying, in fact, wouldn't even be recognized. There would be claims, you know, this goes back to the point we made many livestreams ago about as a particular phenomenon grows rare your sensitivity to it goes up to the point that even at its absence, people see it everywhere, right.

**Heather** 40:39

But I mean, even even your goal, which seems like many steps below utopia, which I know you're a huge opposite of your goal of distributing unfairness equally, I cannot be attained. And I think his points to part of why many of the people on this sort of I insist on calling it the pseudo left, although it certainly does have historical precedent on the left are against things like the family, because families exactly do concentrate resource. And the vast majority of families don't have so much resource, that unfairness can still knock people off something, but you're not you're not going to not let parents give things to their children. Right. Right. That's, that's, that's not an okay goal. And aside from a few fringe loonies, on the far left, no one thinks it is. So you know, an unfairness can be distributed as equally as possible. But if you are raised middle class, you are going to have access to some more stuff than if you were raised lower class.

**Bret** 41:50

Yep, I agree with you. So what we're drilling down to here is, the perfect state can't exist, what you want is the imperfection to be as perfect as possible, they won't be perfectly perfect, right? And so what, at the end of the day, what you want is that what you cannot fix needs to be within bootstraps of equal, right? In other words, if you find yourself on the losing end of this game of opportunity, and the answer is you have to be able to overcome that with something that is under your control. Right? Right, if you ended up losing and then work hard learn to code and yeah, you know, learn to

**Heather** 42:32

code I mean, and that's that is what things like you know, Pell Grants exist for right on this I this is just my go to example, because so many of our students that Pell Grants at evergreen and specifically for the minister, the road programs that I ran, and and we ran the last one that I came to know very quickly that there's a federal program to allow lower income, lower income students to apply for a federal scholarship at the federal level to do to do study abroad was like $5,000 maximum, but I ran these programs, super inexpensively super tight. And that, you know, and a huge proportion of my students got these things. Yeah. And because you worked with them, because I worked with them, because I taught them what a good essay would would be like I worked with them before I was on salary every year, you know, every year that I ran these things, and help them write applications that were actually good and reflected who they were, and not who they imagined these mythical creatures who were reading these, these grant applications would look like that the Gilman Scholarship. So what it's called, struck me and it was so little money. And it made a huge difference to every single person who got one of these Gilman scholarships. And it was just a perfect example of a great way to distribute to redistribute opportunity. Because the students who came from you know, upper middle class or even middle class homes, could generally put together the money given how cheaply around these trips to to get there themselves. But some people simply wouldn't have been able to go, a lot of people wouldn't have been able to go without them. And a lot, you know, a lot of people who had never been more than 50 miles outside of their hometown never had a passport, nothing. I got to drop them in the middle of you know, Bocas Del Toro archipelago or the Amazon. And guess what, you're never the same afterwards. Yeah. And it's for the better.

**Bret** 44:30

Alright, in the interest of self protection. I just want to finalize that by saying when I say within a bootstrap of equality, that means real bootstraps. It has to actually it's not the bullshit that people get told pull yourself up by your bootstraps, when that's not a possibility from where you are real bootstraps distance is the amount of noise I think we can tolerate in the system. Yes, good.

**Heather** 44:56

Life arose nearly as soon as the earth cooled off. Heck We explain the quickness for life to arise only seeming to happen once?

**Bret** 45:03

Oh, I think that's a good question. I would say, because once you have life here, it tends to defeat everything else in the defacto competition for stuff. So that is to say,

**Heather** 45:18

this was what I came up with to its effect its competitive exclusion. Yes, but

**Bret** 45:22

the thing is, it happens even before you have anything that looks like it can compete, right? The simple tendency to accumulate material, right means that those things that you might build a second tree of life out of are going to have trouble sourcing the stuff. And so you know, it's interesting. Darwin specifically leaves open the possibility that there's more than one tree of life. Yeah, because he didn't have the molecular evidence, the molecular evidence allows us to rule out this possibility. If we exclude things like prions, right, which don't have the DNA with which we could say they are on the tree of life, right? So it's it,

**Heather** 46:01

there's nothing contradictory. There's just not there isn't the same confirmatory evidence,

**Bret** 46:05

the confirmatory evidence that says I don't have to worry that, you know, kangaroos and squid are on two different trees of life, because people are among the same DNA code, right? So anyway, Darwin leaves open the possibility of multiple trees in the molecular biology area era, we can say actually, everything we know of is on the same tree, which is amazing. Darwin would love to have known that Yeah. But we cannot say is that there weren't other trees at some point. Right, that left no evidence that we've found right or the evidence has been misinterpreted it's just fossil therefore, we can't look at the molecules. I'm not saying that I think this happened I think the chances are no other tree got a foothold because the tree that was there took all of the opportunities. But it is it is a fascinating possibility. And why would we, you know, have been put it this way, even though mammals have you know, Australia are sufficiently different and bizarre relative to the mammals of the rest of the world. What would an entirely different tree of life look like? And because it's such a delightful thing to know,

**Heather** 47:10

amazing? Yep. Okay, now we have just several lovely comments that I'm going I'm going to read because we got enough of them. I think I'd even capture them all. But

**Bret** 47:22

that's not COVID we know it's not

**Heather** 47:24

dusty or something dry. It's dry. It's what it's the airplane, isn't it? Probably Yeah. We're not on an airplane. Now. We're in a sauna as you can plainly see, but that's why it's dry, isn't it? Yes,

**Bret** 47:35

it's a dry summer.

**Heather** 47:39

loved your bill maher segment. Here's some federal reserve notes to keep the lights on and the excellent content content going. Thank you. Thank you. Good to see you on real time. I am 78 living in LA and got my first dose of the Madonna but having trouble getting an appointment for the second we have heard this from someone else in very much very close to your situation. And that someone who got the Pfizer is already getting the second so I don't know what that is about and what's going on with supply chain there.

**Bret** 48:09

Yeah, it's a chaos. Yeah. My hope and my expectation based on the underlying immunology is that it's not going to be tremendously sensitive to the exact period of time.

**Heather** 48:24

Yeah, it may be it may be quite sensitive to whether or not you get one or two. Oh, yeah. And the dosage. But but the latency between the two doses Yeah,

**Bret** 48:32

there will be it will decay But my hope is that it's on a much art for time.

**Heather** 48:38

I just want to remind everyone how beautiful you both are and I love you get kit you're here.

**Bret** 48:44

You're here. You're here Yeah, no, I get you're here.

**Heather** 48:47

Hi, Heather. Hi, Brett. uplifting as always, here's a fiver and appreciation Best wishes Charlie from Somerset UK.

**Bret** 48:54

Thanks Charlie.

**Heather** 48:54

Thank you and great mainstream debut you looked and behaved like expert adult citizens and treat your audience as such. The politicization science issue was raised perfectly that's it big thanks and Congrats. Thank you Snowden bleep awesome Okay, so let's do boy let's do like three more here I'm sorry we will miss so many and then move into this hours okay. started following you. Oh, it's kind of in this It starts with the comment but we do get to a question started following you guys a few weeks ago. Congrats on the TV appearance. They haven't found a vaccine for the original SARS How can they come up with this and call it a solution in less than a year?

**Bret** 49:38

Well, okay, the need to come up with one for the original SARS decayed because it behaved more like an emergent virus. Yeah. Look, we we cannot doubt there's something amazing about the number of vaccines that have arisen at at this point already. We've got Jordan, Larry, you've got four that are either out or on the verge of available. So

**Heather** 50:06

there are more than a dozen in active development. I

**Bret** 50:09

believe there are 26. I think it's 20 something, phase three, something like that. Anyway, this is amazing. And in fact,

**Heather** 50:20

some of them are using the traditional vaccine technology. Yep. The three that we have available in the US auction is AstraZeneca. available yet here?

**Bret** 50:30

No, there's, there's Yes, about about whether it will,

**Heather** 50:33

right. But yeah, so the mRNA vaccines, one of their great positives, is that they really can be developed, like in a weekend. And so if they prove to be safe and effective, they will be a terrific tool in our, you know, terrific quiver in, in our toolkit to deal with emerging diseases in the future, like really extraordinary AstraZeneca, which is a DNA vaccine. I believe the DNA of vaccines can also be developed somewhat more rapidly than the traditional vaccines, because you basically just don't have to go through so many iterations, right? You don't have to grow so much stuff in the lab, or anything in the lab. Right. So but you know, part of part of it is we need it in a way we didn't for SARS Cove, right for the first SARS. And the second is that, you know, really this technology was, we hope right on the cusp of being ready, and now it's ready. And it's awesome, or was not quite right on the cusp. And we're pushing it because we need it. And who knows. But when was SARS I don't even remember five to 10 years somewhere. But you know, we didn't have this technology yet. We weren't there. And so the best they could have done if it seemed necessary was the traditional vaccine development, which takes years.

**Bret** 51:54

Yep. So anyway, I think if there's one thing this episode has taught us, it's that there is a capacity when needed to generate vaccines very rapidly. There cannot be a mechanism for determining their safety that works rapidly because one question is, what's their effect over time, right? I don't see a solution to that problem. Other than that, these platforms will begin to tell us how much variation there is in the safety of different versions of them.

**Heather** 52:23

Right. So are you saying beer is healthy? No. However, beer will keep you alive. calorie wise. If, if that's what you need. Yeah, most Americans are not strapped for calories, that does not seem to be our problem. And indeed, if you're if you're watching this, it's a good chance that you have access to plenty of calories.

**Bret** 52:45

Yes, I've heard people say that beer is evidence of God and that he wants us to be happy. I'm been unable to establish whether that's accurate or not on account if you can't drink beer and drink beer, and um, yeah, so I guess he doesn't want me to be happy. But

**Heather** 53:01

yeah, actually, gluten intolerance is evidence that God hates you. I guess true. Fear is evidence that God wants.

**Bret** 53:10

I'm not taking it personally. Yeah, I just, I'm leaving open the possibility that it just happened.

**Heather** 53:16

Okay, yeah. That if that's what you need to do to get through

**Bret** 53:21

this where I am? Yeah,

**Heather** 53:22

I'm are high heels. lordosis behavior. Interesting question. So lordosis is the receptive behavior in female mammals, the sexually receptive behavior in female mammals and heels, put the lower back of women into a position that looks that is something of the same curve. You know, heels aren't behavior. But is it mimicking? The the stance? A little, is that coincidental? Not entirely.

**Bret** 53:59

Probably.

**Heather** 54:01

Probably coincidental?

**Bret** 54:02

No, I'm answering the question. I'm gonna go with the one word answer. I think probably the implication of the question is right, that this is the reason that that heels have caught on and

**Heather** 54:14

it's not because they're functional. That's for sure. That's for sure. All right. Where is this hours? Where are this hours questions? Here we go. Oh, boy. We got a lot of them. Okay. Yeah, I like the stock says this person. We didn't talk GameStop at all. Yeah, which i think i think is what this is a reference to Yeah, I don't know. I can't tell for sure. But um, my guess would be do we be

**Bret** 54:45

drunk so good. Look, here's the thing. What's going on with the redditors and GameStop. This should not be allowed. But it's so marvelous that attaching below this behavior what's the gaming of the stock market but I'm not against this I'm all for this version or the fact is this is what goes on all the time and the fact that it's the little guys doing it to the big guys is so delightful

**Heather** 55:15

is a crazy place to start.

**Bret** 55:19

I just my point is let us separate our delight at the the Justice implied in the little guys ganging up on the big guys and squeezing their shorts as it were.

**Heather** 55:35

Is that thing that's been said I like that well, using the

**Bret** 55:38

modified word squeeze but squeezing their shorts. It's really that's good. That's good. But anyway, yeah, look, this is totally delightful. I don't want us to lose track of the fact that really what it reveals is the shenanigans of these exotic behaviors in the financial markets and that there's a lot of harm done I mean, that's you know, including the shorting of stocks the manipulation that these guys are taking advantage of on the part of the hedge funds. So it's delightful let's keep in mind what it is and why it works though and

**Heather** 56:16

Alright, and maybe we'll revisit that goes yeah. Knock knock. Who's there? Biden. Biden, who biding my time till unity 2024. Gabbert amesh Amash sorry 2024 hashtag Gabbert Amash 2024

**Bret** 56:31

I like Gavin. I like Amash. Yeah,

**Heather** 56:33

it's hard with four A's in there to get all the pronunciations right. It turns out Yeah, bird Amash. Right. That's correct.

**Bret** 56:41

Gavin Amash? Yeah, yeah. Anyway, Well, anyway, that'd be an awesome ticket. Yeah, it would be excellent people would be

**Heather** 56:47

excellent. Seems seems more stillborn babies are male. Does it mean more males are conceived. So sex ratio is conserved? What happens when medicine makes stillborn deaths decrease? Yeah, I think probably your male males are more fragile, right? Like males are more fragile throughout the entire developmental lifespan from from inseminate from fertilization to, to to death. So almost certainly given you know, given that we have a return to a primary sex ratio of one to one ish at age a first reproduction, yes, you will expect and we have I can't, I don't have the empirical data at my fingertips here. But you expect that the earlier sex ratios are biased towards males. Such that selection is effectively getting you to a one to one sex ratio, at age a first reproduction.

**Bret** 57:47

So men are more fragile, but we're not going to cry about it. Right? The nature of men? Yep. So first off there, we can talk a little bit mechanistically about why it might be that males are more often stillborn. Could be that the fact that females have a redundant x and males have only 1x means that males are more sensitive to the possibility of a defect on their 1x that is not compensated by anything on the Y because there's very little on the Y. There's also maybe correlated to this something called housings rule that says, I'm trying to get it right. That when there is a hybrid if one of the sexes is going to be sterile, defective or dead, I think are the three. It's going to be the hetero comedic sex. Please tell me I've got holidays rule, right?

**Heather** 58:52

absent, rare or sterile,

**Bret** 58:54

absent, rare or sterile. It's going to be the hetero comedic sex that is in a system like ours, the x y. So this is consistent. It's not the hybrid. But the idea is what you've got is male showing a kind of fragility that were we talking about hybrids would predict the absence of males the sterility of males were still boringness. Yep. So anyway, it's all kind of consistent. And I'd be very curious whether the pattern is true in let's say birds, which have the opposite are females are heterochromatic.

**Heather** 59:32

Yes. So many of these questions about what's going on in humans with regard to sex differences. We should be looking at emails or something. We should

**Bret** 59:41

be looking at emails. Let's go alright. Soon as the livestream is done, okay.

**Heather** 59:49

Talk more about the new mRNA vaccine lipid delivery system. dangers, resources, papers, how deep if you Doug how happy to see you all on Mar We talked about it a fair bit in Episode 58. I think and we do have some references up there, including at least one paper that specifically about the development of the LP is the No, no, the L NP is the lipid nanoparticles. The one thing I think that I said in that live stream is that the particulars are as you would expect, proprietary. So there is there's a fair bit of stuff that you can find on the history of using these lipid nanoparticles. It's not that deep inside deep history, but but in terms of what particular thing is being used in either of these vaccines that are using them? We don't, I think still it's true that we don't know.

**Bret** 1:00:41

Yeah, which I find questionable. I understand in a world where things are financed in the way that they are that you know that there there is proprietary information. But on the other hand, we're being asked to, you know, take these injections and having full information on what's there so that we can actually parse how frightened to be of it or not. seems fair play and there got to be other ways to protect intellectual property. In this case,

**Heather** 1:01:09

I would think, yes, I agree. to any newbies from TV Land thinking, oh my god, a conversation instead of yelly sound bites, hit the like button and share it increases exposure. Thank you.

**Bret** 1:01:21

We can do daily sound bites? No, we can't you win that one.

**Heather** 1:01:26

I think I did. terrible job. Actually.

**Bret** 1:01:28

I was not very convincing now.

**Heather** 1:01:30

Where do you see humanity in a million years? Oh, I'm sorry. Humanity in a million years? Have you really bad person? Wow, wait, if I yelled that, does that work? You're a bad person.

**Bret** 1:01:47

A million years. Okay, I look i'm i'm gonna be grateful. If we're here in a million hours. I just,

**Heather** 1:01:56

you're a bad person.

**Bret** 1:01:57

I it's not an easy thing to do, given our level of technology, and our hubris and our love of trying new things, and gambling everything on them. So I look, I want us to figure our way through this very dangerous period. And yeah,

**Heather** 1:02:19

I just apropos a conversation that we had yesterday, which I will leave nameless who it was with, but also apropos my own science fiction interests and what I have written, my thought is actually consistent with yours, but for the possibility that we have managed to, to expand to colonize not within the solar system, that there's there's no place to go within the solar system that's going to be stable long term. But that some kind of technology has allowed for superluminal luminal travel such that we can actually explore and find new places to be and in that case, it's possible that humanity might still be going in a million years, you still don't think so? Well, here's

**Bret** 1:03:10

the thing. Okay. Look, you want to be here in a million hours. first priority, fusion power, and the political intelligence to manage it. So it doesn't become just another weapon for those with power against those who don't have it. Okay. That solves a huge fraction of our current problems. How long have we been staring down the barrel of fusion and unable to get there? We're not even confused about how to do it. We know how to do fusion. It's just technically hard. Right? Yeah. So the point is, this is a technology everybody, not only is there an immense financial incentive to get it, right. But there's a ton riding on it in terms of what we can do you want to reverse global warming, fusions, the way to do it, right? We know this, and yet we can't get there. It's that hard. Right? So my sense is, you know, is there a trick that would actually allow human beings to be somewhere very distant, you know, breaking the speed limit of the universe as we know it? I'm very skeptical of the idea that even if the loophole exists, that it can be exploited. I don't think it's going to be, you know, simple like fusion. And fusion is so hard that it has been, you know, looming over the horizon for decades. So I just don't see this as a solution to a short term problem at all. I can't see it. Well,

**Heather** 1:04:49

I wasn't asked to. I don't read the question as how do you get there? Like if you've gotten there, where do you Where do you see Oh,

**Bret** 1:04:58

so then the question is, unfortunately, where I see us as stuck is not very much wisdom about the fact that when you have technologies that are capable, you know, let's say, lab leak is clearly a possibility. Forget whether SARS COVID to is such a thing. Sure, you could with present technology, take a virus, massively upgrade its capacity to infect and do harm, and you could release it. Okay, that's a technology that exists, we clearly don't have the wisdom to figure out what to do with a planet full of people where the price point on doing such a thing is dropping, you know, by the year, right. Likewise, nuclear fission, right? Likewise, Ai, all of these things are technologies that we just simply went with the opposite of the precautionary principle. So where do I see us in a million years, I see us having not made it across the gap, right? There's a gap where we've got the technology to kill ourselves off, and we don't have the wisdom to recognize the hazard that

**Heather** 1:06:05

we can cross that gap is how, why we don't get to a million years.

**Bret** 1:06:08

Right. Right. So that is to say if there was some so

**Heather** 1:06:12

I'm saying like I'm in this is this is in fact, exactly what I did in the, in the draft of the science fiction novel that I've written is I've said, that's a black box. Yeah, we got to the gap. If we got to the gap, we really got to the gap. Right now. Here we go.

**Bret** 1:06:29

Right. Oh, you know, this is Eric's point about his hypothesis of everything and the potential that

**Heather** 1:06:38

this is the conversation I was referring to earlier. Yes. Yeah.

**Bret** 1:06:42

But my sense is, is the speed limit breakable. I'm all ears. If it is breakable, is a breakable by something like a person. I'm willing to believe that theoretically, such a thing is conceivable. But

**Heather** 1:06:58

well, I mean, if, as I understand if Eric's right, it doesn't require breaking the speed limit. It's about it's about different dimensionality. Sure.

**Bret** 1:07:04

But, you know, I don't know what he said were so we'll just leave it oblique, but I'm willing to understand that there could be such a possibility. What I'm skeptical of is that that possibility is not a high tech possibility. Right? And if that is a high tech possibility, then the question is, How hard is it compared to going to Mars because it turns out that you cannot extrapolate linearly from the ability to go to the moon and say, you know, how much farther is Mars? Right? It doesn't work like that. Right? Likewise, fusion. You know, fusion is technically not that complex in practice, it's massively difficult. Right? So anyway, there it is.

**Heather** 1:07:55

The story the story of body plant of a kind of terms is even more interesting. Think about CQ covers which appear to evolve towards bilateral symmetry again Yeah, although I don't know I don't have an accounting term phylogeny in my head are easily to pull up so I don't My guess would be the most parsimonious hypothesis would be that they never went radial. Right like that they were just they're basically bilaterally symmetrical just like sea stars are and then it sees stars who have radial and everyone else in that clade stuck with the left right seeing that we've got

**Bret** 1:08:28

like a phylogenetic prediction we can test right after the live streams yet the latest is

**Heather** 1:08:33

later that we're going to go see emos.

**Bret** 1:08:35

Oh yeah, sorry.

**Heather** 1:08:37

I have to make the list Zack you keeping a list? Of course. But Brett please consider a run for Pres. We need civility nuanced thought a path forward, we will support you groundswell for unity. 2024. Hashtag Weinstein 2024.

**Bret** 1:08:55

If that's not a it's not a good job. You're a patriot? I would do it if I had to. I don't want to. Yeah, we can do better.

**Heather** 1:09:10

You me and Tim Poole are political opposites, but find common cause Will this be the catalyst? I don't know. What will this be the catalyst means it's interesting. I don't know. I don't know who this is. But interesting to imagine. us this person and Tim Poole. Political opposites like a three way political opposite. And you know, Tim, used to be anyway, we had we had a lot in common with Tim Paul's view of the world. Yeah, I think that has changed somewhat recently, but I wouldn't I don't think of him as an opposite. Yep. Yeah. Thanks much. Here we go. Thanks so much for sharing Brett's last evergreen class speech. very prescient. We are now truly heading towards a first against the wall club. We need a place for the center to stand perhaps unity. 2020 No. Perhaps you 2022 Love you guys.

**Bret** 1:10:03

Yeah, there's room for a lot of unity, I would just caution there's a lot of unities coming up here in the context of elections, and I see it as every bit as viable in such a context, as we've seen before, but they're, you know, to me, unity is about whatever the patriotic best option would be. And that's not always about electing people, teams, any of those things. It can be that but it can also be much more than that. And I think we just have to start thinking about what options are in front of us that we can't take for political reasons, and then how to make those things politically viable.

**Heather** 1:10:44

Yep. Okay, so we're gonna get through five more here. A couple of them are just comments are sure questions. Just FYI. Proponents of the carnivore diet, find red meat to be the least inflammatory food, or at least far less than many vegetables. Yeah, I know this. Actually, I know this, as I, as I was quoting, this research, and I did not chase down the reference that they were that they were referencing, when the the claim was that gluten, wheat and alcohol are all inflammatory. And of course, there's also it's true that what is it in red wine that is an anti inflammatory? Yeah. So you know, but that seems to like, overcome the inflammatory part. And actually, red wine in moderation is supposed to be somewhat anti inflammatory. So my guess would be that the, you know, the carnivore diet is never struck me entirely carnivore diet is never struck me as likely to be healthy for all but a very few lineages of humans. But that there is something about some combination, just like there was with wine, that it's not just like red meat, bad, or red meat, good. But that, I mean, among other things, for sure, is that red meat of animals that ate like their ancestors did, as opposed to your grass fed and grass finish, not grass fed, and then green finished, and not corn fed, and you know, all of that beef is going to be far healthier for you. And my guess would be anti inflammatory, potentially, whereas corn fed beef, probably highly inflammatory. So that's going to be a big part of it.

**Bret** 1:12:23

So it's also possible and I don't know, this is probably known, not to me. But it's also possible that the, because mammals are inherently going to be closer to us, that they are less triggering of immune cascades involved in inflammation. So in other words, to the extent that we have a self non self recognition system that works in a narrow sense, but it may be that there's a carryover effect that the distance causes greater triggering of the system.

**Heather** 1:12:55

But I would say though, I don't think anyone claims fish or inflammatory, eating fish. I think like chicken like poultry tends to get on that list, which would fit with what you're saying, but I don't I agree.

**Bret** 1:13:07

Yeah. So anyway, it's an open question. I would say though, red meat is not universally non inflammatory. For sure. inflames vegetarians. Ah, yes. I've seen many irate over not being able to eat red meat. That's probably what's happening. They're just hungry. But yeah. But yeah, something about that.

**Heather** 1:13:29

Yeah. Cue for you guys. Question for you guys. Cut. This is so tiny. And I can't zoom in for some reason. Question for you guys. As parents and educators, how can I help my son who was very gifted, but as short attention span and poor follow through on assigned tasks? Boy, yeah, there's

**Bret** 1:13:46

no hope for those kinds.

**Heather** 1:13:49

You're looking at one. Yeah. And yeah, so I don't want to give this question short shrift. You know, we have we had two wall education chapters in our book, and we cut it down to one of those, both the childhood chapter and a school, school and higher ed chapter still. So I don't know if you have a blurb to say here.

**Bret** 1:14:10

Yeah, there are a couple things. One, I'm not sure I ever had low attention span. I'm not even sure

**Heather** 1:14:17

that's what they would have said. Yeah. I mean, you were just at the border of like, didn't get prescribed Ritalin, because they weren't quite doing that.

**Bret** 1:14:24

Yeah, well, not when I was a kid. They tried that later, and I didn't take it and it was garbage. And I wouldn't butt

**Heather** 1:14:30

cheek patched it

**Bret** 1:14:33

just after in a drawer. But in any case, the big hidden question here is about the mismatch between the kid and the stuff. And the fact that your kid doesn't pay attention for long maybe about the fact that this stuff isn't all that compelling to them. And what I would say is, branch out and see if you can figure out what to do. As the kid, right?

**Heather** 1:15:01

Maybe it's guitar, maybe it's Arduino, right? It's bicycling. Yeah. So I mean, bicycling isn't academic, the other two can be

**Bret** 1:15:08

well, but in any of these things, right, if you can get passionate about something, and you know, if it's bicycles, then you know, learn to build one, right? That's awfully thought provoking, and it will teach you a lot of stuff. And the basic point is, the capacity to do things is translatable between realms, the hard part is getting a an environment that rewards the right stuff, so that you actually build up capacity. And there are now some great tools as Heather points out, Arduino if your kids into the idea of building robots stuff, or boxes that do things or making inventions, the world is their oyster at this moment, right, you can just literally order off the internet stuff that they can build into whatever they do stuff that is so good, that actually the adult world has gone crazy with this. They're doing all kinds of stuff, people are building their own experimental apparatus, and vehicles and all sorts of things. So if that's not your kids bag, then find something that is and the real question is, can you beat the motivational issue? Right? You don't want to bore your kid to tears, you want something that they? They want to strive for something because it's desirable to them, and it's enough to get them to invest in building the capacity to get there.

**Heather** 1:16:25

Okay. Three more here. I'm a simple man, I see a q&a stream, I send a Super Chat. How is the revolutionary phenotype breeding going? So that's the second question we got about that today. Yeah, we have we we're not there yet. That's how it's going. Sorry about that. We are in a homeschooling group of about 12 young kids, they're outside playing together undirected. Most of the day, the change in behavior and health has been dramatic. Not sure if you'll send them back to school now. Can you speak to if play is as important? Thank you. Yeah, I'll be play. Yeah, it should it should all be playing calculus. Yeah. You know, at some age, there's a certain amount of formal stuff that depending on what they want to be able to do in the world, actual an effective formal education is going to be probably a better choice. But certainly that isn't through elementary school, I would say. And, you know, there will be people who argue with me about literacy and math and you know what? Your kids growing up, you're, you're writing a super chat question that reads that way. They're not going to grow up illiterate.

**Bret** 1:17:33

Yeah. The problem is, the stuff isn't designed as play, the fact that the play works is great, to the extent that you can get stuff that isn't ordinarily delivered in that form delivered in something closer to that form, great to the extent that you can rewire so that stuff that other people find to be boring is energizing to you. Great. Yeah,

**Heather** 1:17:54

I mean, you put play play is practice for adulthood play is practice for whatever and we play as adults as humans and do some some other Long live generational overlap social creatures do as well. And what it is, is practicing for what other kinds of things you might want to do so you know, expand the boundaries of what play can look like. And play is absolutely fundamental. You take play out of life. And don't be surprised when you end up with people who are addicted to screens and drugs. Yep, absolutely. screen them pills like pharmaceuticals. Specifically.

**Heather** 1:18:40

I thought this was the time Miss 11234. Okay, so last question. Last question. Is it sad that I would trust Pete Townsend and Roger Daltrey more than the researchers being sent to China? Good one. No, I it's Yes. It's It's sad, but not for you.

**Bret** 1:19:02

Yeah. Look, we're not allowed to say the obvious, right? People are human. Right, when they have a conflict of interest. It's not an accusation to say that they should be kept out of something. Now, in this case, you know, Peter datrix, should have recused himself. The fact that he didn't is conspicuous. The fact that he was on the list of people being sent is conspicuous and it raises the question about what the point of the exercise is, what people are not getting, is we, the people of Earth have a right to know what the hell happened and if what the hell happened is a bat infected a mink farm fine if it's a bat infected, a civet fine if it's that it came out of the lab, not so great, but we need to know now and you know, what do we have to do to get an honest inquiry? How much would have to be riding on the answer right? People are still treating this as if the answer answer to the question is irrelevant to our success against the virus and there is no reason to think that that's right. It is likely to be highly relevant.

**Heather** 1:20:08

Yes. All right. Well, that's we've come full circle ish.

**Bret** 1:20:13

Yeah, we always end on a Pete Townsend question. It came just in the nick of time. It's it's

**Heather** 1:20:18

certainly it certainly did. Yep. Alright, so for those of you who are interested in yet more q&a tomorrow, we'll be here with a private q&a at 11am Pacific for people who have joined at my Patreon. Before our live stream next week, you will be having your $100 Patreon conversation from 10 to 12. Pacific. And let's see what else discord servers accessible on both of our Patreon means. We have merchandise available at store dot Darkhorse, podcast.org with a 10%. Sale all weekend with a what was the code I forgotten what the code was the code to get the 10% discount

**Bret** 1:21:05

is remember to code,

**Heather** 1:21:07

not the code by balloons all caps BYEBLU s. You can email dark horse that moderate@gmail.com for logistical questions. Speaking of one more thing, which is that last week, you dropped in casually that we might be interested in, in hiring an illustrator to do some of the merchandise going forward. And our moderator reports that the that the response has been unbelievable. Really, really like so much amazing stuff in contributions, but it just keeps flowing in. So if you didn't hear that before, and you're hearing for the first time now, okay, you can still send stuff into darker stop moderator. But really, this message is not asking for more submissions. It's saying please be patient. We may not get through all of it. And we haven't even begun to look yet. But you know, thank you for the enthusiasm and we look forward to looking at them.

**Bret** 1:22:09

Absolutely. Yeah. All right. I think we've reached the end reached the end right here next week. We'll see be well everybody.