# Podcast episode transcript: Travis Bias and Jeffrey Rogers

**Travis Bias:** Welcome back to Inside Angle. I'm your host, Travis Bias, family medicine physician and deputy chief medical officer of our health information systems business here at Solventum. Today's guest is someone I've known longer than anyone outside my family.

Jeff and I were neighbors at age five. We went through school together from kindergarten through graduating high school. After undergrad, he moved to the Bay Area for graduate school and stuck around.

And a little over a decade later in 2017, I moved to the Bay Area as well. And we reconnected professionally at a Singularity University event for an evening fireside chat with Singularity founder and AI pioneer Ray Kurzweil.

Jeff was the lead facilitator for their executive education programs. And that's when I really started to understand his involvement in this futurist space. And so now Jeff is a principal at Radical, a boutique innovation and leadership development consultancy and the co-founder and facilitation chief at Projectory, an event experience agency focused on attendee engagement. And I can say y'all's videos on LinkedIn look incredible.

He occasionally moonlights as an advisor on futures education projects at the Stanford Design School. His work takes a decidedly interdisciplinary, collaborative, and playful approach, I can attest to that, to envisioning futures and connecting the present to the possible.

He's based back in our hometown of Austin, Texas, and he's an avid fan of dystopian science fiction, fresh seafood, and niche adventure sports. Jeff, thank you so much for being here.

**Jeffrey Rogers:** Absolutely thrilled to join you. Really looking forward to this conversation.

**Travis Bias:** So for our listeners and our audience today, we're going explore AI, but beyond some of the ambient scribes and other clinical documentation and coding tools many of you use daily and beyond some of the population health tools that you're thinking about to think a little bit more broadly about technology-driven change, what's happening across industries, what it means for your careers and the future of work, and how futures thinking and foresight and AI

We're going to explore AI beyond the ambient scribes and other clinical documentation and coding tools many of you use daily to talk more broadly about technology-driven change, what's happening across industries, what it means for your careers in the future of work, and how futures thinking and a foresight approach might help us learn to better navigate all of this uncertainty.

And so to jump into a few questions we've kind of thought about beforehand, Jeff, what you know you work as a futurist. And I think when most people hear that, they picture crystal balls or maybe the magic eight ball from back in our day.

What does futures thinking actually mean? And why do organizations hire you?

**Jeffrey Rogers:** So first off, I usually don't self-identify as a futurist. I often prefer a different term because I think maybe this goes with the crystal ball thing, but very often a futurist is thought of as somebody who's telling you what the future is.

And anybody who tells you what the future is, is probably trying to sell you something. I like to describe my work as a futures facilitator, meaning that I want exploration of futures, plural, not just one thing that we say is the future, but instead possible futures that we might be able to shape, that we might be able to influence through the decisions, the leadership, the strategy, the actions that we take today.

And I recognize that's still kind of a weird title. It's kind of one that I came up with to confuse my boomer parents. But it really aligns with this idea of futures thinking and the the plural there is quite important.

So let's start there. Right? Normally when we talk about the future, we talk about it just like that, the future, singular. And I think most of us, most of the time, kind of envision a tomorrow that doesn't look that dramatically different from today.

We have a linear intuition of change. And very often the futures that we're expecting or anticipating have a lot to do with our past experience. And depending on the particular area, we kind of envision the future is somewhat of a straight line that's trending up or down from where we are today to a tomorrow that is maybe not that differentiated.

But the idea of futures thinking is to recognize that the further forward we're looking in time, the less that projection should look like a line and the more it should look like a widening cone where the scope of possibility is growing, the further forward we're looking, the deeper we're looking into the future because we're also looking deeper into uncertainty.

There's more time, there's more space for things to change dramatically.

And a big part of futures thinking is getting people to recognize and step into that uncertainty to explore possibility and then ultimately to explore opportunity.

And that's kind of where it gets to things that organizations would hire you to do, helping them to open that aperture to maybe surface some of the assumptions they have about what we might call the expected future or what the futurist Peter Schwartz called the official future.

The idea that every organization and I think most organizational leaders are walking around with an idea of what the world will be like. And we're always designing and operating against this body of assumptions, expectations that maybe aren't as responsive to a dynamic environment, a world of accelerating change as they could be.

And so surfacing those assumptions, identifying the drivers of change that we're really focused on and maybe the ones that we undervalue, that can start to open us up a little bit to that wider scope of possibility.

And we might be able to identify some futures that are valuable in that they're ones that we can work with. We can take a vision of a preferred future, a place we would really like to wind up that might feel quite far from where we are today, but if we could see that it's possible, we can start to work backward and ask, what could we do today to make that version of the future a little more likely?

Can we nudge the probability of that outcome. You know, can we start to innovate in that direction? Can we learn in that direction? Can we use that future vision to inform our present practice?

Or maybe we find a future we really don't want to wind up with. And if we can see it with clarity, we can ask what could we do today to reduce our exposure to certain risks? Or to start building resilience to maybe tamp down the likelihood, reduce the probability that we wind up in that very unfavorable world.

**Travis Bias:** Yeah, I think there are a couple of things there that I think in healthcare care really resonates. One is like the framing of seeing this as opportunity. I think there are a lot of places where people fear a lot of what's coming. And like you said, maybe at the end, they're kind of identifying some of the risks and the futures we may not want to see happen. I think one of the challenges in healthcare care is a lot of the way that many of us are educated and trained is based off of decades of experience in the past, right? And so I think it's very challenging for those of us.

I mean, I came out of residency 15 years ago now, and what we thought things looked like then, you know, at the time, the electronic health record was a a very major, you know transition from paper charts to electronic health record was a huge shift.

And now there's the shifts that are happening now 15 years ahead with generative AI and all these other tools that are at our disposal. Well, that opens up that cone dramatically wider than just an electronic health record. So I think seeing things as an opportunity is, i think that's a challenge to get to get human leaders and clinicians to see things as an opportunity because the status quo bias is real in healthcare.

And I think there's just such a heavy lift sometimes to get people from the paper chart to the electronic health record, from the electronic health record to using a generative AI chatbot to guide something that maybe they don't know how that chatbot was trained. And so I think seeing that and I think thinking about breaking it down into maybe more bite-sized pieces or steps to get to that future is I would much rather think about that. I'm not the most creative person. I maybe can't envision the 10 years down the road what I want things to look like, but I could it would be more palatable to me and more practical to think about, okay, let's break this down into maybe 10 steps, you know, processes or whatever, things that I can do to get to that outcome rather than just thinking, oh my gosh, I have to be ready for that outcome next week.

**Jeffrey Rogers:** Yeah, absolutely. And part of this has taken a long view and part of it is stepping into uncertainty, which that's not just a healthcare care thing. Like this is uncomfortable for human leaders and workers in any number of spaces.

But recognizing that uncertainty is a space of opportunity because it means that there's room for change. And in change, there is the possibility of something different emerging.

And if you're in the right position, that emerging thing can become an opportunity. I know you mentioned in our intro that we reconnected when you came to see Ray Kurzweil speak at Singularity now almost 10 years ago.

And I don't know how well you remember that session, but one of the things that we were doing at Singularity and that Ray was particularly emphatic about was getting people across

different industries to understand these technological drivers of change that were rapidly advancing in their capability and also their accessibility, what we would refer to as their price performance, right? The amount of computation you could get for a constant dollar or the quality of a sensor or a digital camera, say, that you could get for constant dollar.

And Ray is always pushing people then to think about the things that are going on outside of the way that they work, the way that they create or deliver value, the way that they serve their customers or organize their business today, to understand how these external shifts in the macro environment are opening up new opportunities and potentially building new risks to established ways of doing that if people can see them, they can start to see paths to new possible, to new opportunity.

And you know if we think all the way back then, some of the things that Ray would have been talking about could have pointed pretty clearly to the space of opportunity in telemedicine, Right, certainly.

In more advanced imaging, certainly. In medical record keeping, you know, now all of the all the current and impending AI waves, those are also things that Ray was pushing on then where he was pointing to the rough doubling of the price performance of computation roughly every year and a half that we had been witnessing decade after decade after decade after decade And Ray was one of the people pretty early on saying, hey, this massive abundance of compute power is going to unlock new capabilities in AI as well, because we're going to have tons of data, tons of compute that we can now throw at these algorithms and we're going to wind up with different better outcomes.

**Travis Bias:** Yeah, thinking about taking that big step out and thinking more broadly takes a little, you said something earlier about a longer term view.

And I guess this is not something we discussed ahead time, but do you do you feel like the short-term way of thinking and the short-term political cycles, maybe organizational leadership cycles.

I mean, is that it just that, that's a challenge, that's a challenge to this.

**Jeffrey Rogers:** Budgets as well.

**Travis Bias:** Yeah.

**Jeffrey Rogers:** You know, we do lots of our financial planning in organizations on and short cycles.

**Travis Bias:** Yeah. Yearly, quarterly.

**Jeffrey Rogers:** Yeah, and there's a tension that exists in all manner of organizations.

Between our long-term vision of what might be possible, maybe even what might be the future of the business or the future of the industry. And that feels like a thing worth exploring. It feels very rich. feels important. But often it feels like it's pulling us in a different direction from our near-term priorities.

The mandate that we have to drive results today, to feed the core of the business, to do the things that are making us all the money that we need to survive quartered a quarter to quarter. And that pulls resources, it pulls energy, it pulls imagination even away from that longer term. And I mean, this is the thing that I would love to talk about and I suspect will come up later in our conversation as well.

But thinking about how we can manage that tension, recognize it's not a problem to be solved. There's never a right answer of, okay, it's the long-term that we prioritize. It's the short-term. It's gonna be a dynamic shifting, equilibrium that I think comes down to recognizing both of these things are really important.

They need to be in conversation and we can find dynamic linkages so that Our vision of the future, the long term, is actually informing how we use the present today.

And what we do in the present today is in service of the long term. Maybe it helps us refine the vision. Maybe it helps us learn or innovate in the right direction. Maybe, to tie back to what we just talked about, we're using the present to nudge the probabilities of the future that we ultimately wind up with.

**Travis Bias:** Yeah, I appreciate you thinking realistically and allowing us to hold those two things in tension that, you know, reality says you got to keep your business afloat. But the long-term viability, sustainability says you have to entertain these possibilities. And so like I could see how it would be fun to be in in some of your executive ed sessions, getting to think a little outside the box daydream about that future a little more, but yeah, so you're right. But before we get there, thinking with this futures thinking lens,

And you know I mentioned some of the AI tools that are kind of fresh and new to some health workers. Are you surprised by how quickly some AI capabilities went from being not really background technology? I guess in everything I read kind of around technology, kind of a smaller set of scientists and experts to being so popularized and being essentially front page news. I mean, I think the chat GPT release in the fall of 2022 is probably a big piece of that, but were you surprised by how quickly the shift happened or is this exactly what futures thinking would have anticipated?

**Jeffrey Rogers:** I would say that futures thinking again is about envisioning a range of different possible outcomes. And for me, the futures plural piece comes more into play when we think about where do we go from here with AI. What does the future development look like? How much does it deliver on the transformative potential? Also known as the hype that we see right now, the incredible infrastructure investment and valuation, all of that, that's the thing we could talk about versus do we actually hit some plateaus.

Do we wind up with a set of really interesting, really useful products but fall far short of the super intelligence predictions from our Sam Altman's and Elon Musk's, et cetera.

But that's more looking forward. Looking back and thinking about you know how futurists approach this idea of anticipation, again, we had relative certainty, even in a very uncertain world, of this trend with computation, right? This that had been going on for a very long time.

And we had reason to believe that that was going to continue at least for... the foreseeable near future. And we saw at the same time as we were stacking up more and more and more and more and more abundant computational power, we also were building huge data sets,

huge data sets. The digitization of everything meant incredible amounts of data that you could train these algorithms on.

And by about, 2019, I would say. So this is three years before the interface moment of Chat-GPT, which, as you said, kind of blew this thing into the popular consciousness. By 2019, OpenAI had released GPT-2, and people who were paying attention saw some real signals of future potential and could think through the implications. In fact, people who were working at OpenAI were encouraging readers of their research to consider the implications of systems that far outstrip today's capabilities, circa 2019. That's almost a direct quote from one of their papers.

And I can remember when I was still working at Singularity at the time, we were doing a lot of demos for people using GPT-2 versions of it to show what some of these generative AI tools could look like.

And we also knew in addition to continually scaling compute that the people who are building these models are planning on building larger and larger models with larger and larger data sets, throwing more and more compute at the wall.

So it was it was reasonable to assume that we were on some kind of trajectory for increasing returns to scale. And, an exponentially accelerating price performance curve. And that's pretty much what we've wound up with.

So in that sense, I would say people who were paying attention shouldn't have been terribly surprised while also recognizing that this idea of gradually and then suddenly that's the nature of exponential change, right?

You're a doctor. I don't need to tell you this. Anybody who lived through a pandemic understands exponential change and that something can go from not a whole lot to an overwhelming amount in what feels like an overnight type window because that's how that's how exponentials work.

**Travis Bias:** Sure. Yeah. And I like the pandemic analogy because that's something that folks in healthcare care and public health have been saying for years. There's going to be a large pandemic of some kind. We need to prepare for that.

Yet I can confidently tell you with AI, generative AI and chatbots, I was not paying attention, as you say, like some of the folks that you work with or that some of the folks you were tracking at the time.

You asked me if I remember coming to the to hear Ray Kurzweil with you at Singularity. I'm pretty sure I can confidently I can remember afterwards we had a cocktail and I confidently was telling you about AI could never replace certain capabilities in healthcare. And you said, they already are, man.

Like, I'll never forget. You were talking about probably like an ophthalmology use case, like retinopathy screening or a radiology use case, you know, the image, a lot of training on image data sets. And you know at the time I was like, wow, like you were you were so confident in rebutting what I had said there.

And it made me start to pay attention. But I can tell you, I think a lot of folks in health care were not paying that kind of close attention in that way in 2019.

**Jeffrey Rogers:** Well, I was also young and working in a futures think tank, which gives you a lot of confidence about making bold predictions about things. And I've probably tempered some of that stuff with age, but I think the example's instructive there, that neither you and I were deep tech people, but that evening, we met in a space that was dedicated to the idea of outside-in thinking. It was dedicated to getting people to consider drivers of change outside of their own industry.

You know, those shifts in the macro environment that might have very significant implications, but for wide range of industries. And I think that in some ways is the big takeaway there that any anyone can develop this practice of active noticing, thinking, hey, what's going on outside of my silo?

If I lift my head up and look around a little bit, another thing that is not always incentivized, you know that's not what we're rewarded for, paying attention to stuff that's going on in other places. But that awareness in an increasingly interconnected, increasingly complex, increasingly digitized world, that can pay off with these kinds of transitions because it might buy us a little bit of time to think through what will this mean for my industry?

What does this mean for my organization? What does it mean for my leadership practice or my role or even better breaking that down into the tasks that constitute the roles in my organization.

You know, when we start talking about where we are with AI and where it goes from here, I think that's a big piece of it, but that all kind of begins with paying attention to what we're paying attention to and maybe taking some time to step back and explore some of our assumptions about what the future will look like and ask whether those assumptions are durable.

Are they still warranted in a changing world? You know, I think that's part of the conversation that we had that evening at Singularity is when you're saying, well, this this could never work or this could never this this could never appeal here.

Well, why not? And is that thing that this is all resting on, is that thing itself changeable?

**Travis Bias:** Sure. What was the practice you said? Active, not active listening, active, active of noticing.

**Jeffrey Rogers:** Active noticing.

**Travis Bias:** I love that. Yeah, no, I think, I think that's something that there are people especially now, and there are communities building of physicians and health workers that are kind of now getting a lot more savvy, just thinking through what do these AI possibilities mean? They are kind of picking their head up, you know, looking around at other industries and other places, but also upskilling ourselves, learning coding, vibe coding, understanding what AI can actually do and do reliably in healthcare. And that's a big piece of, of some communities I'm in thinking through some of the tech enabled, I guess, quality improvement or practice improvement for patients.

Another thing you mentioned was the attention economy. And I think it's the ecology of attention that that may be something that I've read about recently, but just thinking through how and where you're diverting your attention. And I think in the age of social media, I've had to be really thoughtful about where I'm spending my time, where I'm spending my efforts, where I'm putting my attention so that I can learn some of these new capabilities and upskill a little bit to make sure that I'm not just staying relevant, but pushing forward with what is possible in the delivery primary care in my own space, because there's a ton that AI can reliably do now that people are just starting to, so I think, put into practice.

But you talked about some relevant examples from other industries, and I know your work takes you all over and that you've facilitated conferences and education sessions from Brazil to Canada to Europe.

What are you seeing across some of maybe different industries and geographies that might be helpful to us in the healthcare care space? And where are organizations being surprised by AI developments that they could have anticipated if they knew how to think more like a futurist?

**Jeffrey Rogers:** So I'm gonna take a little bit of a zag on this. And before getting too far into futures here, wanna step into the past a little bit. And this will also connect back to what you were just talking about. Like, how do we how do we find the right signals to pay attention to How do we find the things that are relevant to us that will help us sustain our own relevance, right?

And I think part of that is finding the right people to listen to, the right experts in the space. you know We have a super abundance of information. We have a super abundance of voices and finding the right people to follow.

They're gonna help you make sense of what's happening and help you key in on the right signals amidst the noise. That's huge. And one person that I have enjoyed following over the years, especially with regard to artificial intelligence is Andrew Ng, who is one of the founders of Coursera, was at Google Brain and Baidu and definitely a top follow in that space. And you know now also probably seven or eight years ago, he said something about artificial intelligence being the new electricity.

And that's something I think about a whole lot. You know that before I got into the future stuff, I was supposed to be a historian. That's what I went to graduate school for. have a master's degree, dropped out of a PhD program.

That is an alternative future of my own, a possible future that that did not materialize.

I think there are interesting things that we can learn looking at paradigm shifts and maybe some somewhat analogous moments in history and this this idea of some parallel between electrification and the shift to a more AI-enabled world is instructive.

And I'm not the first person to make this connection, certainly. Lots of people at this point have written about the shift in industry and factories from steam power to electrification took quite a while and you had the first commercially available, you know central power plant type stuff in the 1880s in London, I guess. Thomas Edison's Pearl Street station, I think was the 1880s.

And yet, while lots of people could see this future coming that, you know, this is going to be the new thing and it holds lots of possibility. It took 20, 25 years for many factory owners, business owners and operators to adopt this new thing, right?

Because they wanted to use what they had. They were already invested in the previous period time. They had built infrastructure and expertise around this. They had built the workflows within the fact, the whole factory system production is designed around distributing power a certain way from a certain source.

And now we have this thing that might be available more on demand, might be available at any time of day or night. We can actually distribute it throughout the whole factory system. That is a lot of opportunity, but also required stepping away from the known and into the unknown and rethinking or reimagining everything about how that system was organized.

And that's daunting. And we have a lot of incentives in place that don't reward that. They reward continuing to execute on the known. continuing to reap all the returns that we can from efficiency, which means doing the thing that we know how to do really well over and over again at scale, rather than exploring and experimenting with the new, with the unknown and learning. I don't have to tell you this, but I'm gonna say it anyway, because think it's really important.

We learn best when we're making some mistakes. when we're not doing things efficiently and you don't want to scale mistakes, right? You don't want to scale before you've learned.

But in industry after industry, organization after organization, there's this same requirement of learning and of exploring and experimenting and making mistakes. And most of our organizations, and most of our teams are not designed for learning. They're designed for efficiency. Our metrics, our KPIs, our incentive plans, all reward efficiency at scale. And again, tend to have metrics focused on delivering on the near term, bringing in revenue to the business, not learning how to do things that are currently unprofitable. And so this is one of the challenges, I think, for adoption and implementation.

And interestingly, we're not looking though at a 25 year window, you know, of like changing all the physical infrastructure of a factory. Instead, we're talking about the digital tools and a revolution that is moving much more quickly. And I think that actually, poses both an imperative and also, again, big opportunity for experimentation that drives learning.

And so I think the big question then is, what does a good strategy for experimentation and learning look like?

**Travis Bias:** Yeah, you the adoption journey you described in that manufacturing plant, a you could have replaced you know the worker with the physician and the plant with a hospital or a health system or a clinic. And just think about all the new technology tools and digital health tools that we've had at our disposal over the last 15 to 20 years.

And it it's literally the same journey. I mean, as a physician, I was sitting there, and that was putting myself in the shoes of your story because we have just... You're exactly right. I mean, with the EHR implementations 15 years ago, there were reports of waves of physician retirements because they said, just not going to do it.

Not going to invest the time in upskilling, reskilling.

Now you fast forward ahead to current state where there's so much generative AI, agentic AI capabilities that I feel like that's just a thousand times the learning I guess scale that's required to really start to understand what really these solutions can do for us. And so I think that really, in healthcare, care we are reading a lot about how AI is going to change your job. And we get confronted with those messages all the time.

You mentioned in popular media, I think reading, mean, you can read the hype case and scary case every single night about what AI is either going to destroy the world, or it's going to make my life incredibly easy and I won't ever have to work again. You know, those are the two possible features.

**Jeffrey Rogers:** It's going make someone's life incredibly easy.

**Travis Bias:** Yeah, I was gonna say, and mean maybe not the nurse's life, but from what you're seeing across industries, what is upskilling look like?

Like, practically, what does that look like? I think about, I try to educate myself somewhat on some of these capabilities, but how should people be thinking about continuous learning in this uncertain landscape? This is the million dollar question, right? I suppose it's but much more than million dollars. That's like a quaint number for this kind of thing.

So you mentioned the idea of you know just incredible, like staggering capability and how can we even keep up with the advances in capability? And I think I think it's actually more challenging than that because it's not just capability rapidly advancing, it's capability advancing while reliability lags far behind.

**Jeffrey Rogers:** And I think that this is a particular challenge of generative AI that we don't see, you know, AI is a big term. AI includes lots of things, you know machine learning, expert systems, all this that that don't have that generative large language model, same design, and also are both less magic in their capability and more consistent in their output, where if you do the thing and it works, it's gonna work the next time too.

And it's gonna give you the same answer. And we don't have that with a lot of the Gen AI tools where we can get incredible outputs, but those outputs aren't necessarily gonna be consistent. And we may find that the capability drastically outstrips the reliability. And that's a huge problem for lots and lots of applications where, oh, does this thing need to actually be correct? What percentage of the time? What is our liability if it's wrong? What happens if it can't do math? And there are ways of combining different types of AI tools and systems.

There are ways of designing for you know designing around hallucination, AKA just making tons of errors that are also unpredictable.

But that's a huge challenge. And it's one that I think people need to be realistic about. Like what are appropriate use cases? And I think we should structure our learning with that in mind, like really breaking down.

We talked at the beginning about taking roles and breaking them down into tasks, not thinking, hey, we're gonna automate this role or we're gonna automate this industry. And instead thinking, well, which aspects of it can we potentially automate or even better perhaps potentially augment with these AI tools and how do we design systems to do this work well, do it better, do it faster, whatever that is, without sacrificing the reliability that might be essential,

right? Can we leverage the capability without sacrificing critically undermining are our reliability for the value we're trying to deliver. And I think that's a really big part is understanding, you know, what are the tasks? And now you can actually look a little bit more kind carefully and closely at how capabilities map onto the tasks you need to perform.

And you and I have talked before about the jagged frontier idea. I think this is mostly associated with Ethan Mollick and a paper that I believe Boston Consulting Group was involved in. This idea for your listeners, if they're not familiar, that AI capabilities are kind of always advancing, hence the frontier is moving forward. But the idea of the jagged frontier is that there are things that seem like they're kind of similar in our minds. And these LLM tools might do one really well and another one shockingly poorly.

And you can't generalize that across wide swaths of applications, certainly not across jobs or industries. And instead, you have to break down to what is my use case? What problem do I need to solve? What are the requirements? You know, what does success or failure look like at a more granular level? And can it do this thing? And you only get to that through actually experimenting, actually getting your hands on.

And, you know, again, following people who demonstrate good use cases, Ethan Mollick, great follow for one, who's very interested in helping people understand how to use these tools in ways that work for them.

But I think it does require a hands-on approach. And the upside is that these exponentially advancing technologies, part of what's exponentially advancing is not just the power and the price performance, but generally the usability.

These things are becoming much easier for a non-expert. You mentioned vibe coding, you know, we can vibe whatever now. But part of that is that you have these intuitive interfaces and, you know, just natural language prompting that by itself makes it accessible.

But it also creates a layer of kind of mystification and magic. And you may know what it can do, but you don't have any idea how it's doing it. And that that in itself is a challenge.

**Travis Bias:** In healthcare, a lot of what we're seeing in generative AI use around clinical documentation, there really isn't a lot of tolerance for error or for so hallucinations or for omissions actually of key information from so we record patient physician conversations, use generative AI to create my documentation, create my progress note for me, which is a huge time saver and crowd pleaser for physicians.

But now it does take re-educating clinicians to then take their role of editor or validator of information very seriously and I think that's one thing that is a challenge in general where it's not replicable like you say and reliable compared to some of these other rule-based systems and you talk about getting your hands dirty and understanding the jagged frontier on the math problem.

We went to Europe last month and I went back and forth with Claude for probably, I mean, 10 to 15 prompts arguing with it about whether I should buy a certain discount card for my train trips in Switzerland.

And I was like, I'm pretty sure you're math is not right. Like I kept going and it was like, oh you're right. Let me try this again. So like shockingly bad at math and then like incredibly good

at some of the other creative and strategic thinking pieces that have been fun to play around with. Definitely agree on the getting your hands dirty.

**Jeffrey Rogers:** And this is fantastic though. This is, this is progress where you understand, i am not going to trust this thing to do anything involving even basic arithmetic calculations that seem simple. Don't trust it.

A couple of things that came to my mind for this. I mean, one, the idea of having a human in the loop. That is the thing I don't think we should be in a rush to get away from for any number of reasons, but this is one of them.

I think there also may be some irreducible human aspects of the profession, healthcare, care that we don't necessarily want to get away from the human.

And then... Just a practical, interesting hack to apply for some of the, especially kind of like editing and checking of documents and transcripts and whatnot. I've had good luck feeding the output from one AI into another, just switching between your LLM tools and having one check the other's work. Like, hey, did this leave anything out? And that's a way that you can still perhaps augment your editorial capacity without handing it off entirely and trusting it.

And then I'll give one funny use case from my own experience. You know I design in one of my professional capacities for my own company, I design interactions and games for corporate learning events. And very often when we are designing and prototyping games, I need to simulate, well, how is this going to work with 800 people responding? And LLM is great tool for that. I can get a huge body of synthetic response data very quickly.

It should be a reasonable facsimile of what I could expect from the room and that's a great use case. On the other hand, when I then put in the next steps in the interaction or the game and ask Claude or ChatGPT to do this thing for me, I find that it routinely cheats. And then when I ask it, hey, did you actually follow the rules here? It’d be like, no. Would you like me to do it again and only you know perform the task as specified?

And I'll say yes, and then it will cheat again. And it does that over and over and over again. And I have identified again, too much to my own chagrin, that that is just not something that I can depend on it to do reliably.

**Travis Bias:** Yeah, but you only learn that through practice. And I think that's the thing that I think some folks I think are nervous they're going to like break the technology or something. And I think this is definitely one of those that if you play with in your personal capacity, you can start to see kind of what it's capable of.

But one of the things you'd mentioned earlier was about instead of replacing whole human roles, thinking about tasks. What can we, what are repetitive, replicable tasks? Let's automate those. Let's remove those off my plate and then augment me as the human health worker to do my work.

And I think that that augmentation thought is something that's definitely palatable to a lot of health workers. Like that's something I can understand and I can get behind. And so thinking about the human side of, of work, you know you're skilled at a lot of the human pieces of your job, and in my opinion, as a facilitator, you're able to read the room quite well. This is like a distinctly human trait or characteristic that requires high EQ.

And in healthcare, I would argue we take on and practice a similar, what I've seen called connective labor, connecting with their audience. And Alison Pugh describes this in her book quite well, *The Last Human Job*.

And so this is something that I and my team and colleagues wrestle with a lot. Just because we can automate something with AI, does that mean we should? And so in five years, what distinctly human capabilities do you think are going to become more valuable instead of less?

**Jeffrey Rogers:** I love this man and I love Alison Pugh's writing on this stuff. And she has talked about the peril of automating away aspects of jobs that really deliver critical value or maybe play critical connective functions in the organization or in the system.

And this question of, you know, just because we can't automate a thing, should we, I think is one that's really important to spend time with. And there's also a version of the automation trap where once we automate a thing, we're no longer paying much attention to it.

We're no longer questioning, is this the right way to do this thing? And we run the risk of actually baking things into designs and then just pushing them out of view and no longer understanding whether that piece of a larger process is actually fit to purpose. Does it really make sense anymore? Or do we run the risk of accidentally de-skilling our organization or our workforce? Because no one actually knows how this works anymore. Or are we automating bad things, you know.

One example, of course, could be locking in bias, right? Algorithmic bias that maybe was due to poor training data or poorly constructed design of the system. And now no one's looking at it anymore because that thing is automated away. That can be a real problem.

We also run the risk of locking in established ways of doing things that are actually already outmoded. And now we're just going to keep them even though they don't actually serve us well. And we might be able to do that thing with tremendous efficiency. But if it's not even essential piece anyway, then it probably didn't make sense to lock it in.

So I would argue that we have maybe a rare opportunity right now to think as humans about do we actually have these processes and these systems constructed in a way that serve the ends that we really value, that actually serve our stakeholders, that actually serve our patients, that actually serve our internal customers, whoever they are. And question that very carefully before we think about locking it in through automation, at which point it might be a lot harder to surface some of those questions.

**Travis Bias:** Yeah, I guess that's one of my thoughts in the healthcare space is thinking, like, this is kind of a short window but we where we have this opportunity. And Malik and maybe Mustafa Suleiman or others talk a lot about how, as of now, AI are systems that reflect a human value when it's created by a human and directed by a human. And of course, there all the dystopian fears about when AI gets way smarter than us and takes over everything. But I do think there is a narrow window right now.

There are so many pieces of AI that are going to make me a better physician, going to make me deliver higher quality care, make me a lot more efficient. But the 78-year-old woman who I have found something in her mammogram that shows that she may have breast cancer I would argue that she doesn't want to hear that from a chatbot.

Like she probably wants to hear that from a human sitting across the exam room delivering that result to her. So I do think there are some human elements, some communication pieces that are still of high value. Now, if she speaks a different language than me or others, and there may be other places where chatbots can come in to augment even that communication.

But I think there's just a certain human connection that's needed. And Allison Pugh also follows hospital chaplains through the hospital for patients who are terminal. Like that is an interaction with a human where a connection is very different than simply reading the written words of a chatbot.

**Jeffrey Rogers:** I couldn't agree more, man. I don't think that efficiency is the highest end. You know, when we're designing care systems, when we're designing systems of education, when we're building organizations that deliver experiences or products to customers, efficiency is one goal, but it's not the only goal and it's not necessarily the most important one.

**Travis Bias:** That's beautiful. No, love that. One last question here before we go and before we get to our lightning round. Given everything that we've talked about, the pace of change, the uncertainty around AI's trajectory, especially in healthcare, care how do you advise clients approaching this typical two or five-year strategic planning process?

And how do you plan when the landscape keeps shifting?

**Jeffrey Rogers:** I love it because this gives me an opportunity to trash traditional strategic planning processes because so many of them, and like the SWOT analysis, the five-year strategic plan, they're great for managing the note, but they're not very good in worlds that change a lot.

Like our own, right? And when you're living in and operating in an environment of high complexity, uncertainty, volatility, ambiguity, whatever, and accelerating change, I think you need to have a different set of methods on the table.

And I am a big proponent, obviously, of strategic foresight, of thinking outside in, which we've talked about. So you're not just projecting into the future what we already know how to do well, and doing more of that, doing more of that more efficiently, you're thinking about what new things might we need to learn to do or be able to learn to do or want to learn to do. What things might no longer serve us well if the world changes in these ways?

I love that kind of thing. I like scenario work. We mentioned the uncertainty even around... the longer term development of ai capabilities, right? That's a thing that you can imagine existing on kind of a continuum where it's a little more blah and just productized, you know, super clippy or whatever, or it's super intelligent AGI on the other end.

And think about how... what we might do or want to do or what would be strategically adaptive and advantageous changes in those different worlds so that we can have a little bit more of an optionality Mindset and approach rather than be specifically focused on this is what we're doing.

This is the path. This is the line. And we have these incremental goals that are going to get us there. Like we said at the beginning, putting the long term and the near term into conversation with each other.

An old friend of mine from the Singularity Network who was a management consulting legend before that, a guy named John Hagel. He's written a bunch of books. He was at the Deloitte Center for the Edge for a while.

Super interesting thinker. And John, for 20 years, has had this framework that he called Zoom Out, Zoom In, that was meant to help resolve this and pull companies away from being locked in on their strategic plan. And John's advice was to be and regularly thinking about the long term. At the time, I think saying five to 10 years out.

That might have shortened a little bit now. But thinking five to 10 years out, you know what is our North Star? What are mega trends? What are our key certainties and key uncertainties? And then short term, near term, three to six months out, what are we doing today? And how do these things inform one another? Does our long-term vision guide our near-term experimentation? And does our near-term experimentation help us better understand the long-term vision? Awesome. And there are simple tools, like that's a framework that is, it's usable. You can find that thing on the internet.

You can find John's books. You can work with that. Another one that I recommend to lots and lots of people, this is a very established futures foresight tool, often called an implications wheel or a futures wheel, where you start with some kind of thing that is a trend, a shift in the macro environment, a change in your market or your consumer's behavior, something that you think is happening that might have interesting implications and then actually start to work out from there. And I, people literally draw these out on, you know, big sheet of paper, starting from this thing that's changing.

What are the ripple effects? You know, what are the first order implications? Uh, things that we're pretty sure probably going to happen if this trend continues. And then the second order implications and the third, getting into the implications of the implications can actually help us maybe discover some non-obvious consequences, maybe unintended consequences, maybe some emergent possibilities and opportunities.

So I'm a huge fan of that kind of stuff. And it's not that hard to do, but we have to create time and space to do it.

**Travis Bias:** Yeah, I think that's one of the biggest challenge challenges right now is, you know, so many health workers, we feel like we're being asked to do more with less and populations are sicker and resources are fewer.

And so how do we create the space and the time to both imagine those futures and then break down kind of how to prepare adequately for that?

And that's something we do think a lot about.

**Jeffrey Rogers:** Can I comment on that really quickly? I hear this all the time, where people are like, well, you know I don't have a lot of time to think about tomorrow because today is already a problem.

Well, today was once tomorrow. And if today feels like a problem, part and poorly organized, poorly coordinated, not particularly fit to the environment that I have to navigate.

That is a direct result of actions we took or didn't take, conversations we had or didn't have, things we imagined or didn't imagine. And so if you're dissatisfied with how things are today, you can't change how you got here, but you still have an opportunity to shape where we go.

And that is it becomes its own argument.

**Travis Bias:** Absolutely. No, I, that it feels so practical and simple when you say, when you frame it like that, but it's something that, as leaders, we have to take that seriously, right?

The charges before the change is happening so quickly. I know that either it's going to happen to us or we're going to lead, lead the change as, as it's coming, I think. So let us end with a bit of a lightning round, if you don't mind.

AI hope versus AI hype. Can you give me one of each?

**Jeffrey Rogers:** Hype, I don't think you have to look much further than the absolutely bonkers, eye-watering infrastructure investment and valuations and that it looks more and more like the stock market, at least for U.S., companies is basically a big bet on speculative AI boom and kind of circular financing in those companies.

That would be the hype part. The hope part would connect back to what we were just talking to, that there there is an opportunity right now for people to really think carefully about the tasks we do, compose the jobs we do that build the companies that we serve that ultimately, hopefully, provide the services and products to customers and communities we care about.

So we have an incredible moment and I hope we make the most of it.

**Travis Bias:** I love that. I'm hopeful for that as well. One thing people should start doing to think more like a futurist. 30 seconds.

You know, I feel like we've already talked about a whole lot of them. So I'm going to go a little bit meta here. And I think people should remember that everything is a prototype. You know, we're all in this process of becoming, you probably read, you know, the same books I have about that stuff.

**Jeffrey Rogers:** But what I want to emphasize is that, you too are a prototype when it comes to this idea of learning and upskilling. You're not done. No one's expecting you to be done. You always have a chance to grow into the future version of you that you want to be. That can be daunting, but it's also an opportunity.

And the thing you have to give yourself permission for is not just loading and loading and loading, but also occasionally offloading. If you're going to learn new things, you got to unlearn some old ones to free up space in the mental environment. And yeah, find the things that no longer serve you. They're not adaptive. They got you here, but they're not going get you where you need to go.

And let some of those go intentionally so that you have time and space for the new.

**Travis Bias:** I think health workers are strong at continuous learning. So I think are on board with that first part. I think saying no and off boarding some things I think are, is a huge challenge for me, at least a big weakness in mine.

**Jeffrey Rogers:** It's their leaders too. Like I have this conversation with boards and exec teams and organizations all the time that you cannot just add to people's plates. You have to take things off.

And it's so much easier for us to think of all the things we want to start doing. You got to stop doing some things too, or you lose alignment and you lose some of those things that they actually really do value.

**Travis Bias:** I think we are taking too long to do that after the pandemic shutdowns to kind of get back to a reality that is a hybrid in-person and virtual reality. But I think it's been we've been slow to be realistic with ourselves about our time demands on ourselves.

Hot take, what will not be disrupted by AI?

**Jeffrey Rogers:** I'm going to give a joke from my circles. The joke that we always make is that the last thing to be disrupted is going to be consulting work about the future. Fear of the future, for better or worse, is like an endlessly renewable business opportunity. I would argue that the hope side can be as well.

But yeah, I don't know, man, a serious answer to that. What's not going to be disrupted? Hopefully, that connective labor, hopefully people actually showing up as humans, even in their work you know I so appreciate actually having what feels like deeper human connection with colleagues because we spend a huge amount of our lives working. And I don't want to work in an environment, even if it made me incredibly efficient and maybe fabulously wealthy, where I did not feel actually connected to other people through that enterprise.

**Travis Bias:** I love that. And I think, who better than the Oregon Trail generation, us geriatric millennials to understand both the positives and the upsides to technology and the perils as well as potentially becoming a barrier between those human connections and relationships.

So before we go, we've both been fortunate to travel internationally through our work. You've seen AI adoption across cultures. 30 seconds, what's one thing another country is doing with AI that the U.S. should steal?

**Jeffrey Rogers:** I'll give you two, man. Finland has been really great about actually pushing kind of like societal... or society-wide learning around not only artificial intelligence in terms of its capabilities and its pitfalls, but also critical thinking with regard to AI systems and the impact they have on the information and media environment and ecology.

And then the other one that is even more specific is plenty of countries have passed laws requiring AI chatbots to identify themselves as such that they are not human agents. And a few states have done it in the U.S., but we don't have a lot of national action and initiative around this stuff. And, you know, one like that to me feels pretty non-controversial. And we should be able to do that kind of thing. I love to see other countries doing it. We could learn as well.

**Travis Bias:** Yeah, I love those. Last question, knowing what you know about where AI and technology are headed, what gives you the most hope?

**Jeffrey Rogers:** To be honest, the thing that gives me the most hope is actually feeling like there's a little bit more skepticism and critical thinking about some of the big picture narrative on the arrival, the timeline of super intelligence.

And again, I say this as an old Singularity guy and a big Kurzweil fan, but you know some of the companies, big tech companies that are promoting the AGI, AGI 2029. Well, earlier it was earlier 2027, at the beginning of the year, it was 2025. I'm pretty sure it's not gonna be 2025. I don't know about 2027 anymore either. Those companies have a reason to keep pushing that story. That is beneficial and advantageous for them. Buying it is not necessarily beneficial and advantageous for other organizations or individual leaders.

So I am very happy to see people being a little bit more critical about, hey, when can I actually expect these capabilities to arrive? What can the systems that I am...realistically working with actually do for my teams, for my company, for my customers, and wanting to see real results, not sped up demos on the internet and a lot of hand waving about what's coming.

**Travis Bias:** The last three years, I have just seen that in a compressed timeline, the hype curve basically go to you know extreme hype to now people are kind of settling back in. I guess it's the trough of digitalism, but it ought to be kind of just this plateau of a little bit of reality, really, this kind of reality setting in for a lot of people what AI capabilities are going to be able to do for us.

And so I appreciate that last.

**Jeffrey Rogers:** Yeah, we can have real conversations about it. That's good thing.

**Travis Bias:** Yeah, I appreciate that. So Jeff, where can people follow your work?

**Jeffrey Rogers:** Really the best thing I can do is promote things that I am associated with. The innovation and leadership development consultancy I work with, Radical, is online, work with my good friend who's a friend of yours as well, Pascal Finette. We put out a lot of stuff for free. We have a newsletter bi-weekly that's free. Sign up, we share stuff.  It's a good time.

And then also do a little bit of work with some friends at the design school at Stanford, in particular, Lisa K. Solomon, who is one of my mentors and does great work in futures, futures thinking, and particularly helping people recognize their agency in shaping and advocating for the kinds of futures they want to inhabit. So I did a podcast with her recently, and she's the best. Follow her stuff, and maybe I'll pop up there occasionally.

**Travis Bias:** And Projectory.

**Jeffrey Rogers:** Well, that's a little bit of a different animal, which may be of less interest to your listeners. But yes, I do have a company, Projectory, that we do we do fun and interesting things. And we're very interested in experiential learning and corporate L&D.

So we're there.

**Travis Bias:** Fantastic. Well, Jeff, thank you so much for taking the time to do this. What a pleasure. I think it's been really refreshing to take a little bit of a step back or up from the kind of day-to-day practical applications and to really think through our many possible features at

this point in healthcare, leveraging technology and AI and all sorts of capabilities. So to our listeners, thank you for tuning in and we'll see you next time.