Beyond the Diagnosis: A Neurologist on Functional Brain Health and the Power of the Story Transcript

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Podcast Introduction and Guest Background

If your brain is constantly living in that fight or flight mode, whether you're conscious of it or not, you just, You're just going to get worse and worse.

And worse, and worst, worse And so we have to go back to that basics of understanding. Where are we? Are we in survival mode? Or are in healing mode. Are in eating and reproducing and shelter and safety and love making community and all that.

Or we just, you know, trying to figure out if every, if the next turn we're going to get pounced on by the saber tooth tiger. That's, that's a huge piece of what we do.

Welcome to the To Curious in the podcast. I'm Dr. Ali Ahmed. With the wisdom from holistic, alternative and these conventional medicines, we are here to challenge the status quo.

We're curious about the connectivity and complexity between diverse fields of knowledge as a relief to consciousness, chronic illness, mental health, resilience and beyond.

Learning more about art and science of healing, or listening to stories of extraordinary healing. You're in the right place. Let's dive in. Welcome to the Two Curious MDs podcast.

I'm your host, Dr. Surya Raman, MD, and I am here today with my guest, Ken Charlin, M. D. Joining us today, a board-certified neurologist, functional medicine practitioner, With medical degrees from Emory, UVA, and Vanderbilt, Dr.

Charlin spent years in the conventional trenches of hospital-affiliated practices, ICUs, emergency rooms. But as he saw the limitations of a symptom-only approach to complex conditions like Alzheimer's, MS, Parkinson's he pivoted towards a brain-tuned-up philosophy.

a methodology that blends precision diagnostics with deep dive lifestyle intervention. He's the author of the bestselling book, The Healthy Brain Toolbox, and a primary investigator in groundbreaking clinical trials.

We're thrilled to have him here to discuss how he shifted from the conventional path to pioneer disease reversal and truly personalized neurology. All right, Dr.

Charlan, thank you so much for being here. Thank you. You've spoken about the conventional path feeling limited. What was that specific light bulb moment or patient case that made you realize the standard of care was missing and why?

Yeah. No, I think as probably for many practitioners, it evolved over time. For me, the conclusion that I was very unhappy within the limitations of conventional medicine, really on a personal note that, had gotten interested in endurance sports, and that included triathlon, long distance cycling, marathon running, things like that.

I'm athletic enough, but I wouldn't consider myself a lifelong athlete by any means, engage in those sorts of activities, you know, besides getting a good training plan, what should I do today?

How many miles should run or bike or swim and so forth? I knew that other things were important like the quality of my sleep or my nutrition plan especially for a very long distance race like The Ironman Triathlon.

From Conventional Neurology to Functional Medicine

And so as I began to incorporate these concepts of, you know, nutrition and rest and the science of movement, how do you build fitness toward these sort of big goals, I was changing, my body was, changing my brain was.

My way of thinking was and yet I still going to the clinic and doing the routine things that neurologists do. Oh, well you have this diagnosis. Well, here's this medication and might work for a while and then the patient gets worse and you have to add more medication or you've to increase the dose.

And it's a vicious and very, very unsatisfactory cycle because ultimately at that point in time and things have changed, but people were not, you know, people don't really get better.

They control the disease at best, and I knew there had to be a better way. So ultimately in my own journey, which guess was probably different than many people have a say a health crisis in their life and then discover functional medicine.

I was just really optimizing my own brain and body and listening to podcasts and ultimately stumbled upon the work of David Perlmutter, who's about 10 years or so older than I am.

but has really pioneered the application of functional medicine to neurology. And when I read his book, at that time it was Grain Brain, I knew, wow, that opened up a whole new world for me and that I needed to change the way I practice medicine, bring the same principles that had been applying in my life into the clinic and truly help people change their disease trajectory.

Wow, that's phenomenal. That drive to really see what else is possible, the curiosity and then that willingness to then say, okay, I can do this for one, how can I expand that out and do it for this group of people who really could benefit from this?

You're a walls protocol certified health professional. How do you decide when to use high tech interventions versus low tech nutrition and lifestyle approaches?

If you want to think about it that way. Sure. Well, and my philosophy has evolved, you know, going from traditional neurology learning functional medicine, connecting very early on with Dr.

Terry Walls, who's just been such a dear friend to me and a cheerleader and mentor and just somebody that I can share ideas with and ultimately sharpen my own thoughts about things.

And then I met other people. I did meet David Perlmutter. Or I meet Dale Bredesen. You know, I tried to surround myself with the people who were doing somewhat similar work within the space that interested me most.

And then, you know, things go from, I came to this from a really strong foundation and belief system in lifestyle medicine, meaning it was still functional medicine.

I see functional medicines practiced in different ways. But to me, because I was interested in the movement and the nutrition and, you know, the sleep and all that, I felt like if we were going to make a difference in people's lives, we can't skip that step and give them the magic healing supplement and that's going fix everything.

So, you know, if you do, for the viewers or listeners who watch this, that they're familiar with Dr. Walls, and she's really a champion for a lot of people, to me, what she represents other, she represented a lots of wonderful things.

fantastic scientist and clinician and thinker, but her work is very foundational. I'm not sure how many people realize how foundational her works is, you know.

And I think that's incredibly important because I often lose sight of that. You know, as my own work has evolved and I've gotten interested in aspects of regenerative medicine as well, I can't lose site of the fact that some of the

regenerative stuff is maybe sexier for lack of a better term than working on your sleep or your movement, although food's pretty sexy, I think.

But then you're talking about stem cells and things like that.

Foundational Lifestyle Medicine and Regenerative Care

The reality is you can't really jump into that world of regenerated medicine with a context or a background where things are not really operating the way they should be at that foundational level.

I mean, how can one, you know, people are out there and there's some wonderful work being done in stem cells, but it's an out-of-pocket commitment. It's extremely expensive.

And I hate to see people, not get the results that they want, because they aren't working with a highly qualified practitioner in that arena, created the foundation for success for themselves by also working on the food and the movement and sleep and stress resilience practices and their connection and cleaning up their environment.

You know, the fundamentals. Absolutely. And you know your trigger here was exercise. Like you started to move more and you said something very, I want people to kind of really latch onto that, that my body was changing, my brain was That is such a, like, critical, I think, place of overlap as well because you can actually see a change.

You can measure it now. And this is something that I, think there's a molecule called BDNF, right? Brain-derived naturopathic factor that is excreted or set, you know, kind of increases in our neurons when we exercise.

That's one of the main ways that BdNf You know, it opens up the window to neuroplasticity. That's where neurons can actually kind of make more connections, right?

And this is where this connects with psychedelics. Because one of the common end pathways for a lot of psychedelic, which is how they open up that neuro-platic window, is their ability to, you know, increase the levels of BDN or whether it be hours like with ketamine or, whether, it'd be, weeks like, with psilocybin and longer with others.

And there's just this really interesting moment where we're recognizing, and this is why us as, we as psychedelic practitioners, really do put a lot of emphasis on this exact thing that you're mentioning, is that if you don't optimize the foundation, no matter what you do on top of that, it's not going to be as well as it would have been had you paid attention to that foundation.

So you know, we're talking about nutrition, you were starting breath work, or we were saying going out into nature, We're saying gain some flexibility, pay attention to exercise and all of that.

And we know that when somebody is optimized that way, their psychedelic experiences have a much more lasting impact on their depression. Yes. That's right.

Like just that makes sense to you. Can you explain a little bit as to like what that common pathway for you, you know, how do you explained that to patients?

It's like, if you do this, this will happen and this is what you want. Well, I still, and I had clinic all day today. I see folks who come in with a variety of problems from Alzheimer's and Parkinson's, MS as I mentioned, we were talking about that.

migraine, of course, depression and other mental health issues are often comorbid with neurological issues. We have to recognize that. And I still prescribe medication where needed, where it really makes sense.

In a sort of a pact or an agreement with the patient that, look, First of all, I can recommend something, but this has to be something you're willing to do.

But I also explain that from my perspective in the ideal perfect world, when it makes sense to use a medication, the idea goal should be, you know, that we're going to also work on the whys.

We're gonna work those root causes so that in a long run, we don't need this medicine anymore. Solve the problem. And so I see that toolbox as having gotten bigger by adding functional and regenerative medicine, not necessarily smaller or necessarily saying, well, I'm no longer going to practice traditional neurology because there's no role for, say, medication or surgical interventions, because that's just not true.

There are. I think what we have to really realize, or the shift has to be, if we're going practice personalized precision medicine, we have to go beyond what is the diagnosis?

You know, We have To go to the person with the Diagnosis with a condition and really understand them deeply Holistically as a person sort of my body mind spirit and say what Is right for this person in this situation?

today right and then it might make sense to use a medication and just instead of just saying, well, I'm just anti medication.

Exercise, BDNF, and Neuroplasticity

And, you know, just do everything naturally. That's just I don't even know what that is, because some people need it. Look, we're all human and there's not a single answer.

I mean, either one of these categories or buckets does not hold all the answers. Right. But we can certainly close the gap we can narrow that mystery, that unknown, significantly by using all of these tools and strategies together.

Absolutely. Because I'm just thinking, as you were speaking, when you and I probably started our training, the medical system was a different kind of medical systems.

And even before that, my father was the physician and that was like, there's diagnosis and there is treatment and it's antibiotics or it is IV fluids or is just very cut and dried.

Medicine had a function which was to save your life, fix your bones, you take out something that didn't belong in your body. Then since that time, we have learned so much more.

about the complexity, the organizational kind of, you know, what I would say, I think, intelligence within our design even, as to, just this idea that breath work is kind a technique that we can use to actually calm down and see our heart rate drop, that, we have conscious control of our body.

That's something that, yes, other cultures have known, but in the Western mind has really just only started to seep in. And now we are at this place where through all of these tools that you have, pharmacological tools, micro, molecular biology tools.

Genomics, I mean, just this entire monopoly that has shown up. The healthcare system is not complex enough to deal with the complexity that your talking about.

Well, yes. And I always say that being a physician, look back on those days of pre-med and you got to major in chemistry or physics or biology and math and all of those things are great.

Don't get me wrong. I was an English major, by the way, and went to medical school. But I do say, that we are really in the discipline of human behavior informed by science.

I think it's foolish to think that somehow all of this is just straight up molecular biology, as you put it, or chemistry. Mechanistic. No, human beings.

Yes, we have to understand those things. And especially, I personally think that there's sort of a functional

medicine 2.0 or 3.00 that's moved beyond what I learned, you know, more than a decade ago in functional because of these changes, the advancements and AI and so forth, that we can now use the tools a little bit differently and really practice precision medicine.

But in the end, Again, we're dealing with total human beings. We can't ignore, We cant just say, well, I'm going to just work on your mitochondria. That's great.

You have to understand what your Mitochondria are and what support they need. And yes, i certainly agree with that. But those mitochondria are encapsulated by this flesh and blood thing that we call, say, Dr.

Rahman here, right? And she comes to this sacred space of sorts, this exam room, the doctor's office, where we come in with the white coat. It really is a ritual.

But we have to sit down. I go in the room and I say, well, first of all, it's a pleasure to meet you. And I bring a computer in room, but it is closed.

It's not even open. I sit down in my chair and am making good visual contact and say before we get started, where are you from? Tell me a little bit about yourself.

What do you do?

Personalized Neurology and Root-Cause Treatment

I believe these sort of icebreaker kind of conversations, they are so important because I imagine the person's waiting in the room for the doctor and they're sort of practicing their diatribe.

Like, what am I going to say? I'm going have five minutes. You know, it's going all come out and like, hold on, who are you? Tell me about yourself. Effectively, I am saying, What do you believe in?

What makes you excited? what kind of problem solving are we going do together today? Now, tell me your story, right? And that's when this sort of magic happens or starts to happen.

And yes, then we can, you know, address some of the sciency stuff, of course. That's fun. It's really cool what's going on and all that, but it still has to begin with the person, You got to meet them where they are.

And I just love how you just describe that. It really goes to the core values, I think, of being a physician, right? I mean, those of us who have kind of taken a different route, a non-traditional route and have the kind really I think that forces us to maybe describe a little bit more intricately and more authentically what it is that we believe, and I love how you said that, what do you believe and how are you holding the circumstances of your life and being in this and bought in this body and how are you treating that?

I'm curious because I think a lot of what you have to say, maybe some of our younger physicians in training right now really need to hear because, I can't imagine what it's like right to graduate residency and go into this market where you're expect to see 20, 30 patients a day.

And I hear it, I read, and I see just the level of burnout and the loss of meaning. I feel like you're really talking about how functional medicine is not only about the interventions, but it's about relationship.

It's also about slowing things down a little bit, even within the constraints that are put upon you. We all have constraints. And as we grow older, I think we just have a little bit more understanding of how to gain more control over those constraints and shift the goal line a bit and make some room for ourselves.

But most of them start out by not really knowing what's possible. So I feel like when we've been out and doing this for a while, it's really interesting to hear from physicians who took that alternate path and how they can even start to apply or bring in the concepts of functional medicine into their life or to help them to do what it is that they came

into medicine to to contain that fire, to hold on to that.

and not let it go out because I think that's one of the dangers of what's happening right now is that we're losing physicians to suicide so rapidly that literally you might as well just not graduate four classes of medical students every year because they're not going to make it.

You know, and so I think part of what you and I have learned over this time is like, you've got to do it for yourself. And in some ways, think for itself within this, because the system is not set up to deal with this level of complexity that is actually our bodies in.

Some ways actually this behavior and biology that you're talking about this overlay. Right. It's becoming even less and less able to that because nobody's in leadership right now making, sound decisions that would allow us to.

Do that for more people. The system, the conventional I call corporate medicine, it's really truly broken, but more and more as my own thought leadership sort of takes hold and I'm very blessed to teach regularly for A4M.

I've spoken at many, many national international conferences. to, you know, speak my mind and to say at times, well, even functional medicine, I think has drifted a bit and I, think is at risk for what I call allopathicizing.

And I'll just give you an example. I saw a patient today who she had had a stroke. That's at least as much, I haven't seen all the records to be a hundred percent certain that she definitely had a stroke, but that was the narrative that came to me with.

And she's in her late fifties, she is obese, and she has a type two diabetic. She at some point, the diabetes had gotten under such poor control that she was placed on insulin, which you probably know is just, you know, about the worst thing you can really do for a type two diabetic, in my opinion, at least.

And I have to spend a lot of time explaining it to folks that, there's a reason that the body becomes insulin resistant, and that if we're going to just drive more glucose into the cells, just to make someone's blood sugar look better, we really sort of winning the battle, losing the war, of course, right?

But she had been to a functional medicine clinic and I said, you know, well, tell me about that. Well, I have all kinds of issues with mold. And then I found out that at some point in the past I had Lyme disease.

Then they were giving me IV nutrition and they gave me a lot of supplements. They're now telling me that I should do hyperbaric oxygen. I was like, whoa, did anyone sit down with you and just…

Human Behavior, Burnout, and the Limits of Corporate Medicine

Listen, like get your story. And I said, functional medicine begins with really basic things like, where are you from? Tell me who your parents were. How were you raised?

How was school for you? Your friendships? What did you eat? Did you grow up in a rural location? or maybe an urban location, and you begin to piece together the trick, what we call the triggers and then the mediators and, you know, really understand that person.

And, You know what are your belief systems around food and like, how do we get from this one, this very lovely and she's a pharmacy tech, she is educated, from being obese and diabetic and insulin dependent to having Lyme disease, which is irrelevant here, right?

And there's so much that we know, and what really has to happen is we have to engage our patients in a way that captivates them, this is your arena because this There's a spin-off of Arthur Kleinman's work, The Illness Narrative, that was, for listeners, very respected.

Kleinmann's Questions. Deep dive here, Dr. Charlin. Yeah. Oh, this is my stuff. This is jam. I love it. There's a

physician who got his PhDs up, I don't know if he's still at Michigan State.

I'd be happy to send you this document, but he wrote his Ph. D. thesis and it was informed by Kleinman's work and is called the diagnosis narrative, which I loved.

And basically says, you know, It's all about how do we engage people? How do bring them into the fold so that they have this aha moment? And not just intellectually, it's like cigarette smoking, you know, gosh, I know it is bad for me, but in my heart of hearts, i'm not really ready to quit, right?

We all know those people and that's fine. I get it. Right. But when you have that moment that from here, not just from up here. Then you're like, heck, I'm not picking up another pack of cigarettes.

Or I am having this moment where now I realize that maybe I have this very unhealthy relationship with food for a whole variety of reasons, maybe adverse childhood experiences.

Maybe I wanted to, you know, this is how I connected to my parent or I had a You know, there's all kinds of issues that go on and that's what we have to learn about the person.

And once we do that, then there is that connection. Then we can start to develop this plan. There's nothing wrong with saying, you know the body is complex, the brain is, complex chronic inflammation is usually due to a whole variety of factors.

Sometimes, you know, occult infections or chronic infections can play a role. But to me, everyone has their own personal narrative. And I know you go to the doctor, someone tells you something and you either believe it or you don't believe, it you're kind of a skeptic.

You know, when you see thousands of patients with a variety of diagnoses and they've been to a functional medicine practitioner who's told them the same thing, no matter what's going on with them, that's not even informed by any of the science that we know about what really drives these diseases, then I think we have a real problem.

So what I'm saying is, look, folks, mold can make you sick. The rickettsia spirochete can make you sick, but let's really think about what is known about these diseases and how they affect us as a total person at the cellular level, at subcellular level because we have this gift as functional medicine practitioners that our colleagues in allopathic medicine don't have.

We have the gift of story and narrative and understanding why people get sick, but we also embrace this thing called systems biology. And we can take that information and what is known about what's happening at the cellular level in diabetes, for example.

We can actually address that in a very rational, scientific way. which is why I'm saying functional medicine is at sort of the 2.0 or 3.00 stage instead of, well, I don't know if they used to say, and I know you're certified, but they use to, say well if you are not sure, just start with the gut.

Remember that? I mean, okay. The gut is very important. Very important, the microbiome and all that stuff. Yes, of course, you should be thinking about gut health and all that.

But it's time to not say, well, if I'm not sure, I'll just start with the gut. It's not an algorithm, it is not a formula, It is a person. And with tools that we currently have to understand these diseases at a very deep level, we also, unlike our colleagues, have the resources, the knowledge and the experience to address these complex chronic conditions in ways that really get people better, right?

Yeah, absolutely.

Narrative Medicine and Understanding the Patient Story

And I can't wait to, I think we're at a moment to realize that, yes, you're right, the tools that are available have just exponentially increased our ability to see those patterns.

Having seen those gather the data to see what the outcomes are. I mean, I did not expect the medication that I've known for 15, 20 years as ketamine as a sedative drug that increases your blood pressure.

When it's used in the mental health context, sometimes what I'll see is the patient's blood raise up a little bit during the ketamine session, but then because they're so relaxed, their blood pressure will actually normalize.

And what we then see sometimes after we do a few sessions and their anxiety is better, they are having a better lifestyle, is they start to wean off their pressure medication.

Because we ask those questions of what's the stressor there? And as you said, It's in those Kleinman's questions, which are so much about who the person is, how they look at those behaviors every day.

And it's those accumulation of behaviors over time that really lead to health or non-health. You're really getting at that incremental nature of health and nonhealth, in our everyday, quotidian kind of like cycles that we may get into that, we don't even know the reason why.

And I think you really described it very well. I said there are unconscious patterns, unconscious pattern. Then I this is the other thing that getting into this kind work is like then you get to actually look at your unconscious patters because somebody's there by your side kind mirroring to you going, hey, do you do that?

Or what do think about this? And giving you tools to to navigate that. That's beautiful. These are such powerful compounds and this is a subject I'm certainly extremely interested in.

I am sure you would agree that we are really just at the very, very beginning of where things will go with psychedelic therapy. And I'm sure you're quite a bit more knowledgeable than I am, but we are blessed to have a local psychedelic society and made up of every, you know, attorneys and politicians and, scientists and things like that are promoting awareness and hopefully change at the government level.

So folks have more access to this. I was just curious because I see Everything from ketamine, which is obviously completely legal, to MDMA, psilocybin, some of the other compounds, ibogaine, and so forth, in two ways, really.

One, for me, is how these compounds allow us to sort of quickly, fairly quickly and effectively access I'll just say the limbic system of the brain that really sort of sits in some respects behind a fortress, right?

We have these very hardened belief system habits, instinctual reactions and things like that. sometimes in order to effectively help someone on their healing journey, that has to be sort of broken down and reshaped and reformed and sort-of reimagined, if you will.

And that, you know, certainly I have not had the experience of psychedelic trips on myself, although I'm personally very interested. I am sure I will one day.

But how quickly through this default mode network, you know, that people come out the other end and their whole perspective on things is completely different, even after a single treatment.

And we need that because in order to truly go from treatment to healing, sometimes those belief systems have to change, right? And then, and the other part of it that I find interesting that it was, it's new information for me and I'm just beginning to explore it.

We were talking about this before we hit record, is this concept of psychoplastinogens or neuroplastenogens, which are, to my knowledge, synonymous terms, but this idea that there seems to be a mechanism that play through specific known pathways with things like ketamine, probably psilocybin, and so forth that is entirely separate from the hallucinogenic portion of the drug or the plant or experience, the natural medicine itself, and that the

observation started with ketamine, actually, that within 24 hours, of administering ketamine.

Nerve cells are making new connections. They're growing, they're changing. Here we talked about exercise in the beginning and how powerful that is, that you can accomplish something in 24 hours with ketamine that could take weeks to months.

with exercise. So the ability to really accelerate healing and to truly remold the brain with these types of treatments that we have now, but in the clinical trial pipeline, as you probably know, There are compounds under investigation that have no hallucinogenic properties at all, but appear to achieve a very similar, if not potentially more power, you know, because that's the way they're designed in a better way than ketamine itself.

Psychedelics, Neuroplasticity, and Healing the Brain

So I think it's just, I'm sure you could talk much more about it than I can, But that what's really exciting me now is, boy, can get my patient from point A to point B in very short period of time.

What if I take They send a litic therapy, clear all the garbage, infuse them with some sort of growth signals, stem cells, exosomes, and at the same time use one of these compounds that activates this pathway.

I mean, The possibilities are unbelievable in terms of healing disease. Absolutely. And we're talking about patients with MS, Alzheimer's, these neurodegenerative diseases that for the longest time, we just never had a cure for.

You mentioned a patient with stroke. Certain types of stroke have devastated consequences. The fact that we've always taken as an adage, you can't grow back nerve cells.

We literally grew up on the message that you can't grow nerve cells. And here we are at the cusp of putting together the answer that says, but wait. But there's something else.

There's more. Which is always, I think, the idea that, and you answered the curious question, you know, what you're curious about really beautifully before I even asked it, because with curiosity only then can we open up that next possibility.

And that's that kind of like, you know, when we talk about neuroplasticity and the place we're at right now, which is that most of us are feeling like reality is very overwhelming.

the reality we're living in. We don't feel equipped neurologically, neurobiologically on some level, right? Because of all of these factors, like none of us, you know, it takes a lot these days to function normally, function well as a biological animal within the environment that we are in and it's really opening a window to this idea that actually we can, I'm not talking biohack, we could actually maximize our potential because we actually haven't hit our yet most of us, because we're not thinking in that way.

We're actually not maximizing what we carry. No, and to your point, I mean, that's a whole other, you know, sort of hit a hot button topic for me as well, which, now I probably should have been a psychiatrist, not a neurologist, but- It's that English degree.

Watch out. I, mean you, know how many of our colleagues understand this You know, when I teach, let me go back up and say when i teach at A4M and talk about essentially what is, what does, how do we take the discipline and neurology and bring in functional and regenerative medicine?

What is at its core? And what I have to explain to my students, which are other doctors and nurses and therapists and so forth is that, you know, the brain's primary directive, and I always conjure up mission impossible, Mr.

Phelps, your mission should you decide, is survival, right? Survival. Everything else matters, none, Right? Your brain, Your unconscious brain is constantly taking in data and sort of the litmus test of Is it safe?

Is safe yet? One of my favorite lines from a movie, Marathon Man, Dustin Hoffman, is it's safe, yet. But the point is that when you think about it, you know, Selye was correct, right?

I mean, if we are constantly in that fight or flight mode, what is the brain gonna do? Everything shuts down. It's all about survival. We will turn every system off.

Energy turns off, there's your cell danger response, I mean, we don't need to eat, shut down the gut. We don' need reproduce, hormones go to zero, right?

And until we, as a healing community of physicians, embrace the foundational idea that that fear and survival, right, drive so much of this, and even when there may be a separate trigger for a disease, say Epstein-Barr virus, you know, if you've been exposed to Epsteine-Barre virus and you're genetically susceptible with HLA, DR2, et cetera, then you have low vitamin D and maybe you'll be, I mean, chances of you getting MS are extremely high.

Right. But if you, at the same time, as a human being, if your brain is constantly living in that fight or flight mode, whether you're conscious of it or not, you just, going to get worse and worse, and worst, worse.

And so we have to go back to that basics of understanding where are we? Are we in survival mode? Are in healing mode, are we eating and reproducing and shelter and safety and lovemaking, community and all that, or are just trying to figure out if the next turn we're going to get pounced on by the saber-toothed tiger?

That's a huge piece of what we do. And it is so often missed, it's certainly missed by every single one of our, at least non-psychiatric allopathic colleagues.

I'm sure the psychiatrists understand that. It's in the social history in pediatrics, literally like three lines. But can we do anything about it, right?

That's the question. Yeah, we got to do a lot about. And maybe it goes back to the psychedelics. Again, there's tears, of course, here and not everybody is going to be treated with ketamine or psilocybin or ibogaine and all these other things.

Day one, you're going to begin with breath work and neurofeedback and heart math and meditation. But if we don't measure it, if don t know where our patients are in that spectrum of what's called the general adaptation syndrome, They're not going to get better.

They can take all the supplements in the world and they are not gonna get. And what I think is fantastic though is that, you know, it's just like everything else.

Survival Mode, Stress Physiology, and Healing

You have layers of, some people they're easy, they get it, They respond quickly. We can move on to the next step and other people, They are so deep in that narrative of fear that this is where the use of a psychedelic drug like ketamine is going to be a game changer for these folks.

You get it. It's about seeing that path forward. And if they can't yet see it, That kind of opening that psychedelics can allow can just really bring us to the realization that it's possible.

And I think the other piece that's really that you touched upon, but I really want to bring into focus is the fact that so much data is available. The personal trackers you mentioned, just the data that we can get out of our blood chemistry and all the different molecules that are in there.

Then the ability to see how quickly the body changes. Because until we had the ability to measure in this personalized way, you would go to your doctor every three months, get lab work done.

You wouldn't have immediate feedback as to which of your behaviors were helping. What were the different layers?

How much was sleep interrupting certain processes of healing?

How much was your dog needing to get up in the middle of the night, part of problem, you know? Like all those things, we weren't able to put the story together with what was happening.

Now, what do you think of this moment where you can now get all of these data? Do your patients like that? Are they, do incorporate that into your process as you're talking about this adaptive space?

Yeah, go ahead. Yeah, no, we do. We do and, you know, hopefully like everyone else we're getting better and better at it. It's gone from the very sort of analog approach, if you will.

I mean, in functional medicine, everybody learns like the medical systems questionnaire and we can track our patient systems. And I have various tools for tracking, my neurological patients, whether they have Parkinson's or Alzheimer's.

You know, we have a fatigued rating scale. But to your point, I mean, not only are there digital trackers, you know I'm wearing my Apple Watch, but I wear a ring, right?

But then we now are in the age of AI, especially agentic AI in particular. So we can create, and this is not something that I made up of course, but a digital twin of ourselves, so digital-twin technology is really on the cusp.

There are a few companies out there that have developed this, but it's not a snapshot, right? It's a dynamic, ever-changing digital Twin. And with the benefits of agentic AI, which we can tap into today, These AIs can pick up these patterns very quickly and personalize responses and interactions with us and do so as if they're our own personal health coach, right?

And that's powerful because, you know, I see 375 patient encounters. I have a lot of patient counters every month. And, you know, I'm certainly not the doctor that says, five, that is the five minute visit with you and say, here's your pill and I'll see you in six months.

But, but there is still a limit that it's time. There's still, no matter what, even if I spend more time with my patients, can't be constantly looking at your Apple watch data or your Oura ring data.

but when we incorporate these tools that facilitate that process as we are. at my clinic, Charlin Health and Neurology, then it takes things to a whole other level.

So we absolutely are. There are companies that if your audience includes other practitioners, there are company out there that you can meet with and partner with that will help you do that.

But yeah, we're quite deep into the digital tracking and making that information meaningful and personalized and helping people to, you know, ultimately get to a much better place in their lives.

Absolutely. I think that's really smart. And I actually, I, think a couple of weeks ago, it came across like an app that was about, um, You know it was, an, app form of a similar thing where it can tell you how long you're going to live.

And that's kind of like the metric they're using for how well you're doing compared to, and you enter all your data in. You put in lab work, you put it in your, And you kind see the thing change.

And what I like about some of these trackers though is their ability to not just future cast, but link that information to the present moment and the president behavior.

Digital Tracking, AI, and Personalized Outcomes

It can link it to the last week, the two months, so you can do rapid and targeted behavior change that is actually not going to be very onerous because it's probably going be something small, a tweak versus a large lifestyle change

because everything else is going working well.

It's just a really interesting way to bring that focus in because that's something that a lot of patients really struggle with. because of this nervous system that we have that is prehistoric and still thinks they're saber-toothed tigers.

Now we just have cyber trucks. And our ability, I mean, allows us as practitioners to create tools on the fly that allow us to help our patients. I've been working lately on introducing, there's a combination of compounds that have been the subject of some reasonable but not a huge body of research, but still very present in the medical literature.

And that's a combination of a cancer chemotherapy drug called desatinib with a natural compound called quercetin. And this has been studied in a variety of diseases.

We refer to this as synolytic therapy. In the spirit of what you're talking about, that sounds sort of exciting. But ultimately, you want to know if you're going to take this approach, did it really actually do anything?

Did it work? did I clear those old worn out zombie cells and reduce my inflammatory load? So, in the last couple of days, I developed, and by the way, i do no computer programming at all.

I know nothing about computer programing, but Claude helps me, right? And so I created a calculator that lets me track my patients treated with Desatinib and Quercetin and actually know have we reduced their senolytic burden, if you will.

And I couldn't have done that even a year ago, but now I have a tool that I can use in my office. So we're really doing end-of-one studies. What you're doing is showing your own outcomes data, generating your outcomes and making it personalized.

Because studies and the way we conduct randomized controlled trials and large-scale trials, they're centered around the therapeutic Does this molecule do what it says it does?

What are the side effects and what are large-scale population impacts of it? That's what we're really testing. We're not really test saying what is this one molecule going to do for this person.

with this body, with his personalized makeup, which we know can be so different. Now that we different SSRIs, people metabolize it differently. Some people have really bad side effects and we didn't pick that out until we got to, you know, phase four and post, right?

That's so interesting. You're absolutely right. We can build these elegant models now and we say, okay, I have this tool. It's a tool, right? But is it the right tool for you?

How can we use this in your particular case? And I can take your age or gender. I could get whatever the relevant data is, a few relevant blood tests.

Maybe your level of physical activity. I can put it into this mathematical model that is a little computer program. And I could say, yep, this is going to move the mark for you.

Let's do it. Right. This is gonna make a difference. Beautiful. No. And with that, I hear your clock going off. Thank you so much for your time today and your generous conversation.

I feel like we really got to the meat of some good stuff. So thank you for you time, Ken. With that we'll see you next time. You've left us with some really interesting questions as to where the field of medicine is.

We've really traveled through an understanding of what is possible. and what is coming and this is really a conversation that I hope young, you know, trainees and physicians and those interested in the healthcare field really take a listen to because I think what, what as apparent is that it's a lifelong journey of learning and you never

stop learning.

And you learn because it benefits your patients. Thanks for joining us on the Two Curious MD podcast. We hope today's episode inspired you to ask new questions and explore fresh perspectives.

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