



# Coding the Brain: Thinking About Thinking With Dr. Jeff Karp

## **Lauren Clouser:**

Welcome to The LDA podcast, a series by the Learning Disabilities Association of America. Our podcast is dedicated to exploring topics of interest to educators, individuals with learning disabilities, parents, and professionals to work towards our goal of creating a more equitable world. Hi, everyone. Welcome to The LDA Podcast. I'm here today with Dr. Jeff Karp, a distinguished chair at Brigham and Women's Hospital and professor at Harvard Medical School and MIT. Dr. Karp is also a keynote speaker at our upcoming 62nd Annual Conference with his session: harnessing life ignition tools to empower learning differences. Dr. Karp, thank you so much for being here. We're so excited to talk to you.

## **Dr. Jeff Karp:**

Yeah. Thank you so much for the invite. It's so, so wonderful to have this conversation with you.

## **Lauren Clouser:**

So I wanted to give you the opportunity to just tell us a little bit more about yourself and maybe even some of the projects that you're working on in the medical field that are really exciting.

## **Dr. Jeff Karp:**

Absolutely. Well, when I'm asked that question, I need to start that I am Canadian, born and raised in Canada. I moved to the United States actually in 2004, with my wife and came to Boston really to get into the ecosystem here in the bioengineering community to try to figure out how I could make discoveries in science and then turn them into technologies that could help patients as quickly as possible. And so that's what I do today. I run a research lab at Brigham and Women's Hospital in Harvard Medical School. And my laboratory focuses on the process of medical problem solving, and it's a highly iterative evolving process. And there's many different sort of facets about it. But essentially, our goal is to try to make scientific discoveries and bring them to patients as quickly as we can.

And I've been using a formation of companies essentially as a vehicle to move technologies out of the lab. So I've cofounded 13 companies. And many technologies developed in my laboratory are now products on the market that are helping patients, as well as a number that are going through clinical trials. And just briefly, you know, one of the technologies we developed is a glue that was bio inspired. So we turned to nature for inspiration. And we created a glue that could literally seal holes inside a beating heart, and seal blood vessels and gut tissue. And now that's in 2 clinical trials, one for nerve reconstruction, one for hernia repair. We developed a needle that can automatically stop in between the layers of the eye to deliver gene therapy to the back of the eye, to potentially treat diseases like macular degeneration.



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It's really difficult to get drugs to the back of the eye. So we have a needle that we developed. It's like an auto stop needle technology. And then we've developed all kinds of different ways of delivering drugs to the body, to the brain, to the joints, to treat arthritis, to the gut, and, yeah, all over the body. So it's kind of a playground, if you will. People come from all over the world. We've had people from over 30 countries in the lab, and are highly multidisciplinary. And in my spare time, I just love spending time with my family.

And we have 2 dogs. So, actually, they're not therapy dogs per se, but I kinda feel like, I just love going to bed with them at night and waking up in the morning and spending all day with them whenever I can. And yeah, I'd like to get out into nature and really experience the nuances that are there and really try to attune to the rhythms of life.

### **Lauren Clouser:**

Definitely. Well and you do a lot of really impressive and really important work. But I wanted to talk a little bit about the lead up to get there, and to go way back. Could you tell us a little bit about your experience as somebody with learning disabilities while you were growing up? What was that experience like for you?

### **Dr. Jeff Karp:**

Yeah. It was really hard, actually. And not to say that it's not hard today, but, you know, we have a lot more tools and things and being able to gradually over time create more of a pause in between the stimulus and response is something that I continue to work on. But in the 2nd grade, when I was 7 years old, that's when things really started to present. And I just wasn't able to keep up with anything. Nothing was landing for me. I'd sit at the back of the class really feeling demoralized, and I wasn't connecting with anybody as well. So I really didn't have any friends.

And my mom tried flashcards. She tried phonics, you know, trying to sound out words. Just nothing was working. At the end of the school year, the teacher pulled my parents aside and said that he wanted me to repeat the 2nd grade, so to hold me back. And, you know, it's quite a shock to me to sort of think that through. But luckily my parents negotiated with the teacher that if I spent the summer catching up with tutors that I could go on to the 3rd grade. And so my classmates went on vacation and there I was in summer school. And I'd go in every day and they'd ask a series of questions.

It was actually called, I went to this thing called the Gallup Learning Center. I remember that. I



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remember actually going in. You know, sometimes there's these, like, vivid pictures in your mind, just snapshots throughout your life, and that's definitely one of them. Because something transformational happened that summer. And what happened was I'd go in every day and, you know, similar things. And they asked me questions. I never really knew the answers or felt like I knew the answers, but I just sort of blurt things out kind of in an insecure way.

But one day I did that and the tutor turned to me and asked a question she had never asked before, which was after I gave this answer, she said, how did you think about that? And immediately, I mean, I kinda felt violated in some way when she asked me that question, you know, because I didn't know that was really possible. And I hadn't really thought about it very much. Right? But it really left an impression on me. And I remember sort of going home and that becoming a core focus in my mind. I feel like often in our lives when we have these things that are said to us or situations we find ourselves in where there's like an emotional pendulum, like it sort of imprints, you know, something happens and emotionally we're like, oh my god. You know, almost like a fight or flight response. And that just imprinted on me, and it became a focus of my thoughts. And it was almost like this canvas appeared, and I started to be able to think about thinking.

I didn't really know it was possible. Many times in my life, people have told me to think before you speak. Right? But I really didn't know how to do that. And that moment really was a light bulb moment because I started to think about thinking. That's when I really started, that was a moment in my life where I could...it was kind of like where pattern recognition became a thing for me. I started to observe how other students were behaving in certain situations, what they would say, and what the teacher would say, and how they reacted. And then I started to just learn through, I would call it purposeful or intentional repetition. So, you know, I think we all learn through mimicry.

You know, when we're a baby, we sort of look out at the world and we just start mimicking. And it's sort of a natural process. And I found that I really had to put energy and effort into doing that as a survival skill in order to figure out what to say, what not to say in certain situations. So I feel like I often said the thing that was the thing not to say. And I ended up in the principal's office many times. We got to know them pretty well. The vice principal usually is the one who had to deal with things first.

But, you know, over time, what happened was almost like the way I would describe it. There's this scene in Terminator where, kind of going way back where maybe I was, like, 8 years old or something when that came out. But there was a scene where the Terminator, the first one, is in



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this room and this guy's knocking on the door and he's kind of like, what are you doing? Get out. Get out. And the Terminator is sort of thinking what to respond and this screen pops up with maybe 6 different options of what to say. And he kind of pauses and then he picks, of course, the worst possible one to say. And he says that. But that's how I feel. Like when I was asked a question, all of a sudden I could see multiple answers, and I didn't know which answer the teacher wanted.

And it took me extra time to figure out what's the highest probability for one answer over another. And so I struggled a lot because of that. But I also feel like today that is an opportunity. Right? To channel creativity and to be able to see things from different angles. So it's almost like the rigidity of the school system really clashed with how my mind worked. And I almost felt like I had this hardware, if you think of the computer analogy, but I didn't have software that worked for me. And I knew the hardware was there. And my mom kept telling me, I have very, very, very supportive parents, and my dad would help me with all sorts of math problems, physics, and all this kind of stuff.

My mom would help me with all kinds of other things. But I have so much to say, by the way. So I wanted to pause for a moment here because I know I could just go on and on.

### **Lauren Clouser:**

No. No. That was great. And you already started on this question that I had, but you mentioned that the tutor was sort of the catalyst to get you to think about thinking.

### **Dr. Jeff Karp:**

Yeah.

### **Lauren Clouser:**

What are some things... and the support from your parents as well sounded really key. But what would you say was key for you to begin to thrive in that classroom? I mean, you noticed different patterns, picking up things that way. What would you say were some of the key things for you to be able to thrive?

### **Dr. Jeff Karp:**

Yeah. So I think pattern recognition was really key because it was almost like there was this social language of how school worked and how people communicated with each other, and I didn't get it. It didn't make sense to me. And so being able to gradually observe, I think we're all born with and throughout our lives, we have this incredible power of observation. And I think that



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sort of the society that we live in today, we're sort of gradually or maybe quickly sort of disengaging that power of observation. And so I feel the power of observation for me was a key survival mechanism or approach or tool, because it allowed me to learn the code. I realized when I was younger, I was the coder of my own brain essentially. And if I didn't put effort and energy into it, I just probably was going to fall through the cracks, because I was a c and d student.

Now the other thing until the 7th grade, the other thing that was really key, and I'm glad you asked this question, is that, while everything was sort of crashing and burning for me in school, and I just would have a lot of anxiety too because I wouldn't understand instructions. Everything was vague to me. And still to this day, my children ask me to help them with their homework. It doesn't go very well often because I just find the questions are so vague that are being asked. And there's just so many ways of thinking about it. And again, it's like what's the way they want me to think about it, and I don't know. So, one thing that really helped me, actually, because I really had a lack of confidence and low self esteem and I had teachers that would call me lazy. They would call me, you know, that I'm never gonna amount to much.

What do you wanna be? I'd say, oh, I want to be a doctor or a dentist or whatever it was. And they said, oh, you better set your sights lower, you know, because you don't have it in you. And it was a bit demoralizing, but there was something inside of me that was kind of like this spark that I could identify with, that just sort of prevented me from spiraling further down. And what was really helpful is that in the 4th or 5th grade, I think it was the 4th grade, we started to do these speech competitions in my school. And, it was like a thing. I don't know if it was like a Canadian thing or I can't figure it out. But my mom would write the speeches for me.

And then she would sort of help me memorize. And I was terrible at memorizing, like the worst. But she started with just one word. And then if you can do one word, you can do 2 words. Like that is really it with any skill. If you can do one step, you can take the next and the next and the next, and eventually, there's a lot of steps there. So I feel like that's something that we all need to sort of think about. Like, oh, I'm so bad at that.

But to me, sort of once you find a process that works for you, you can actually start taking these baby steps. And so it was 22 words, and then it was a sentence, and a paragraph, and a page. And eventually I had the whole speech memorized and my mom coached me how to say it. And it was really frustrating, very difficult for me to do that. But she really stuck with it. And I think, you know, I probably used a lot of swear words and slamming my door and that kind of thing, like just anger, but she stuck with it. And what happened was I started winning competitions. I



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started to become the kid to beat.

I started taking home trophies. I would win in my class. I'd then go to the school. I won a number of times there and I went to the city and, you know, got on like on local television, that kind of thing. And so to me, it was almost like just having one thing that you can gradually develop confidence in, for everybody, you know, child, adult, to me, it's just so important to always just have that one thing that you're sort of making progress in because it really can have a domino effect throughout your life. And it can be you can just sort of take that as a model and say, okay, where else can I apply that? And so that gave me this hope that I don't know if I would have survived. And then the other thing that I'll mention is that, the school that I was in, it was a small kind of school, it was an hour and a half northeast of Toronto, in a small city of about 65,000 people called Peterborough.

And they didn't really, you know, learning differences. You know, ADHD. They weren't really knowledgeable about it, and they didn't really want to do anything. They only had a certain amount of resources. So my mom actually built up this case of everything that had ever been said about me. All my grades, all the report cards, everything, and my assignments, everything. And she went to the school board on her own and demanded that they take a look at me. And she'd gotten through half the file and they're like, this is unequivocally identified as having a learning disability.

And so I was then able to get accommodations and so I got extra time and extra space, which, by the way, I got not only in the tail end of the elementary school, but high school. I got it in my undergrad and in grad school. And my grades literally from grade 6 to 7 went from c's and b's to straight a's. Because I had been developing these tools along the way, finally, I had the accommodations I needed. I just needed extra time. I needed a quiet space to do things and, and that was the ticket. By the way, I still had to work 2 to 3 times harder than everybody else, like, constantly, constantly. So I had to give up a lot of socializing to be able to maintain those type of grades.

But, yeah, those are the things I would say were really critical for me. It was having one thing that I'm was confident in and the power of observation and then having supportive parents, someone who just really believed in me.

### **Lauren Clouser:**

Definitely. And that's something that we hear a lot too is the finding an area to excel in and especially there's a lot of supportive parents out there who are willing to do the most for their



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kids, and it really benefits. So just a little bit more on that note, could you tell us about your life ignition tools, and how did you go about forming these tools? It sounds like you kind of became a little more self aware of how you knew how to think, and did those tools form from there?

### **Dr. Jeff Karp:**

Absolutely. Yeah. Yeah. So, I mean, the life ignition tools really were discovered through the laboratory of my own life, I would say, and really began, in between the 2nd and 3rd grade when I was asked that question. How did you think about that? And so that moment actually, or that experience really started to, not just sort of help me tune into the power of observation, but it helped me to identify, like, sort of focus my attention on things that could help me. Right? And one example, you know, I get off the bus. So we moved out to the country actually when I was in the 3rd grade, which was, you know, had its pros and cons, but I loved it. I mean, it was just, it was a con because I was now, you know, socialization wasn't easy for me and I wasn't connected.

Now I'm actually farther away from everybody. You know, the closest neighbor was like a 20 minute walk. But it was incredible because, you know, there's a sheep farm beside us, a buffalo farm across the road, and a farmers field in my backyard. My driveway was like a 1000 feet long and there was like a bridge with a creek running across it. And I wake up in the middle of the night, there'd be a pack of wolves on my front lawn. And I could just go on and on and tell you about all kinds of things. But I would get off the bus and I would be so tired. I'd be so exhausted, kinda demoralized you know, I was trying to fit in.

I was trying to assimilate. I was trying to figure it out. And that required a lot of energy, a lot of mental capacity to do that. So I would just be very drained and kind of ruminating after I got off the bus. And as I walked along my driveway, you know, there were no cell phones or anything back then. I would just kind of walk along this 1,000 foot driveway which was carved through a forest and I just look at the trees and the shapes of everything and see animals all the time. And, just, you know, the smells and sounds, I would just tune in to it. And, as I walked, it was like each step I took, I felt like nature's embrace, you know, like I could feel almost like nature was hugging me.

And it was, looking back, it was very therapeutic to have that walk after school, to kind of calm me down. And that's one of the tools is actually hug nature, which is really all about today's society where so far we're kind of moving further and further away from nature, our own nature. And I think that the scientific evidence is really unequivocal that spending time in nature can lower our heart rate, can lower our blood pressure, can give us a general sense of well-being. It



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can reduce anxiety and it's not just what you see, it's what you're smelling and hearing. And it's just like this immersive experience. And the research is also starting to show that it's important to go into nature and even just close your eyes for several minutes and just sort of sit with whatever, just sort of use your powers of observation. And so hug nature to me is this tool that has stuck with me because, you know, as I kind of move more into urban settings, where I went to college, for example, and then where I live now. There's so many things we can do during the day to connect with nature.

Like one of the things that I do is, when I'm walking the dogs, I cycle through my senses. So I'll actually say sight and I'll just try to focus my attention on what I'm seeing, like the texture of the bark of the trees and the tops of the trees and all the shapes and things and colors, the way the lights reflecting off of everything. And then I'll say sound and I'll listen for the birds and the wrestling of the wind and the leaves and then I'll say touch and I'll feel my clothing against my skin, and I'll feel my heels hit the ground. And it's very powerful when you practice it because you start to notice the nuances. Like our powers of observation are really, really powerful, but they're dimmed in this culture that we live in. And you know, there's so many things that we do where it's just like our attention is grabbed onto something that doesn't require us to observe or kinda spoon fed a lot of things like all the stuff online. But I think, you know, for thousands and tens of thousands of years, our powers of observation helped us to survive and the nuances there. So this tool of attuning to the rhythms of life and connecting with nature regardless of where you are to me is so powerful because it's such a nice outlet.

It's such a nice way to move our brains from the fight or flight response which we're in constantly from everything we're experiencing to more of a calm state. And, you know, my personal belief is that people who are neurodiverse, whether it be autism or learning disabilities or ADHD, whatever it is, my belief is that those people actually really helped with survival for tens of thousands of years because you're able to notice things, and patterns, in nature that others would miss. And then that really helped, basically where to go or where to get food, or where not to go or what might be edible. You know, these kinds of things. I think there was a real benefit of being neurodiverse in terms of helping the community to survive. But then if you sort of look at today, where these very rigid structures like the school system and the corporations that we've created. It's incredibly rigid and I think it really does a major disservice and almost creates this situation where we're looking at these, we have to call it a learning disability in order to get the services, but it's really not a disability.

You know? Like really to me it was the opposite. You know? For tens of thousands of years, it was an asset to have these things, but now it's a disability because of how we've constructed





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our organizations. But anyhow, I just mentioned one of the tools, there's 12 life ignition tools as part of a book that I wrote that came out in April. But really there are all the survival tools that I sort of tapped into over the years and then eventually use to thrive.

### **Lauren Clouser:**

Yeah. That's fantastic. And I know your session is going to touch on that a little bit more too, which we're excited about. But you had alluded to this a little bit earlier, but I wanted to dive in a little bit more. So you had talked about these tools that you have to overcome your learning disability. Would you say that you've totally overcome your learning disability or are there still tasks that are challenging for you that you sort of find workarounds for?

### **Dr. Jeff Karp:**

Well, I don't think you ever get rid of it because I think it's part of, like, your wiring. It's part of the fabric of the cells in your body, your DNA, it's part of who you are. And so to me, it's not a matter of...I don't think it's possible to fully get rid of any one particular thing. But I think what you can do is, like, one thing we can all work on, people even who don't have learning differences is we can create, it's almost like we tend to be very reactive. Right? And I think as well the digital world that we sort of are submersed within makes us even more reactive. Right? Like, it's just the pings and things we're getting constantly. And this reactivity is something that in many ways is a choice, how fast we react to things. Because what I've learned through my experience is that, and this is actually one of the tools which is called press pause.

And it's when you find a way to create pauses in your response. So let's say you hear something, and you quickly want to say something in response to it. But if you're able to pause and think about thinking right in that moment, it allows you to then tailor your response. It allows you to also tailor the emotion that's associated with that response. And so to me, it's like I still get lots of triggers. I still get the impulse of reactivity. But I feel like through practicing pauses in my day in a very intentional, purposeful way, I'm able to, in my interactions with other people, be more regulated. And so that's what I think we can really work on.

Like, there's that regulation aspect. And, you know, everybody's different and everybody has different challenges in that regulation piece. So it's important. Like, I feel like we talk about ADHD. No two people with ADHD are gonna be identical, but there'll probably be a lot of similarities, but there'll also be differences. And so there's that whole spectrum. But I just think that, there's so many things like, the forgetfulness, you know, of walking into a room and trying to figure out why did I just come into this room, or did I feed the dogs, or did I not feed the dogs yet? Like, I can't remember. Like, that happens all the time.



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I mean, even the simplest things like, is my house number 239 or 237? Like, sometimes I forget those simple things, or even my phone number. Like, every once in a while, my mind will be in a state and it's so easy to quickly move into self shame when those things happen. But I found tools also to actually prevent that most of the time. So for example, I mean, there's so many examples I could give you. But like, one example is if I send an email out, and I don't hear back, my immediate response is, oh, my god, I said something too much. Like, I offended the person. They don't like me. And then so what I did, you know, recently, I sort of thought, okay.

Well, this is happening kind of frequently, and I need to do something about it because it's kinda bringing me into this negative space. I was like, okay. Well, what could I do? Why do I feel that way? And I feel that way because I care, because I want to be connected to this person. And then I think, well, caring is a quality that I like, that I want, that I want to cultivate more of in myself. And so I was able to switch it from a negative to a positive, and that allowed me to then sort of unhook or detach from the negativity that my mind wanted to ruminate towards. And I think one of the challenges for me is that, you know, my mind does...I mean, I could just give you tons of examples because I'm constantly tinkering and doing these things. When I go to bed at night, I'll give you another tool and then I'll push pause.

But when I go to bed at night, I feel like rumination, self shame, all these things don't require any energy to do these things. They're really easy to do. You know? Like, it's just so easy to go into negativity and just be, like, caught in that. It's almost like an indulgence in a way because it's just so easy to be there. But what I realized is that, okay. my mind, I had all these visualizations and things when I was a kid, like, just in my imagination, going all over the place. And I would use it as an escape actually when I was younger, and maybe a little bit to this date as well. But what I do is I'm like, okay, how can I use this to my advantage? That's what I do is I envision myself as a miniature version of myself standing on the backs of creatures in nature.

And I think to myself, what would that experience be like? Like all my senses. So if I'm standing on top of a bumblebee, for example, what does the texture feel like on my feet? Right? Like, what am I seeing? I'm going into and out of the flower. Do I feel the wind from the wings? Right? Like, what's the sound? Right? And so when I start thinking about those things immediately, it allows me to unhook or detach from the rumination, from the negativity. Oh, you know, I forgot to send that email. Oh, my god. I have a presentation in 2 days I didn't prepare for, you know, all these things that I'm thinking about that will just keep me up all night. And it allows me to fall asleep super fast because I'm using a little bit of energy to envision myself.



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I'm now switching to curiosity. And I think that combination of curiosity and requiring a little energy to sort of think about, oh, what would my experience be like? It just allows me to let my natural rhythms take over and fall asleep. So it actually works incredibly well. And it's not just a bee. I mean, you know, I stand on the back of like whales and camels and ants and monarch butterflies that are migrating. You know, I just sort of come up with different things.

**Lauren Clouser:**

Yeah. Like a redirection of that energy.

**Dr. Jeff Karp:**

Yeah. Exactly.

**Lauren Clouser:**

Well, I really liked your answer too. The learning disabilities and related conditions, you know, they're they're always going to be there. They're always going to stick around. But whether you're neurodiverse or not, there are things that you can train your brain to do so you can get out of these negative cycles like you just mentioned, so I really love that answer. And you had mentioned too in your answer about self shame and I wanted to talk to you a little bit more about that because when we interview people with LD a lot of the time they'll bring up that self shame. So could you talk a little bit about that and how can somebody fight this negative self talk about themselves?

**Dr. Jeff Karp:**

Yeah. Well, I think that, again, I mean, I feel like if we go back, you know, tens of thousands of years, I can't see this really being a thing because I just think again, neurodiversity was really an asset for survival. Right? I mean, we were outside working hard all day and trying to find resources and figure out where we should go next. We're all nomads. Right? Like, kind of just traversing the globe. But I think today, I really feel like the self shame is a product of our society and where we've kind of evolved, you know, as communities and in our organizations. I think it's important to recognize that because, to me, I think the self shame often, you think that it's really you. But what I've kind of realized through, you know, thinking about this and doing research and things is that it really isn't.

It's really a product of there being a mismatch in terms of just your wiring and sort of the institution or the framework of whatever organization you're in. Right? And the rigidity kind of associated with that. And I think that it's amplified as well when you're online because we have this comparison culture. And I think that the content online is hyper-curated to make everything



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look so amazing and people's responses be so crisp and so clear and right? And I think that that also has a very big negative effect on our self esteem. And in many ways, I think that the online sort of digital world preys, not intentionally, I hope, but, unintentionally, I think on people who are neurodiverse. And it just amplifies the self shame. Right? And I think that, the problem too is that I was shamed by others when I was younger. And I think that programs in this wiring for self shame, to then just loop.

Right? It's like the voices of others are now imprinted because it was an emotional sort of response that, it was very triggering to have somebody of authority say something negative to you that was, like, attacking your your being, like, who you are and having that at such a young age just imprints and it's hard for that to ever go away. And so that I think the self shame is that you kind of latch on to that and it just repeats, it just loops. And there's so many ways to be triggered. And to me, one of the ways that I've tried to deal with it is to sort of be able to, well, I think one is to pause. So pressing pause is really key. And then I think, another one actually, one of the dogs just came to say hi to me. So you see me kinda leaning over to one side. That's what's happening.

It's Ginger down here. So pausing, I think, is so important because then it allows you to reflect and almost get out of it, it helps you to sort of observe what's happening and start to be curious about it. And then I think once you start to be curious about it, I think there's ways to then question it. Like I said, with the emails. Right? Like, there's ways to sort of ask what's behind it. Like, for example, let's say I'm in traffic and I'm getting really frustrated because things are moving slow or someone's cut me off or whatever. And just all of a sudden, I mean, not necessarily self shame, but sort of similar, like a parallel track. All of a sudden, I just get angry.

And I'm like, oh, what's going on? And, you know, fight or flight just hits me really quickly. If I can find a way to switch to curiosity, like, say, oh, where is that person going? And what did they go through last night? And what are they experiencing in their life? Like, why would they be so angry right now when they're driving or doing those things? And maybe there's something behind that that's responsible. And maybe they're having a difficult morning or they're having a difficult time in their life. You know, then all of a sudden you start to, through curiosity, you can access empathy and compassion and you're able to then switch. So to me, there's all these like tools and a lot of it I think is pausing to access curiosity. And when you're able to become curious, I think then you start to develop this understanding which then helps you to have a tool to unhook from that self shame.

**Lauren Clouser:**



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Yeah. I again, I really like that answer. You brought up a lot of good points about it starting externally. Unfortunately, that is still very much the case for a lot of people. It's that they hear negative feedback and can internalize it. So I really like pausing and thinking and being curious.

### **Dr. Jeff Karp:**

And by the way, I mean, it's just, even just pausing here. I mean, it's so sad to think about all the children that right now that are being, you know, having these emotional imprints that are then they're gonna be triggered for the rest of their life because of it. And, you know, it's just so unfair and sad. And I think in particular the education system. I think it's kind of stating the obvious but like, it definitely needs a big overhaul but I'm really excited of where things are going with AI, because I do think that there's a lot of personalization that can happen. I mean there's a lot of ways it can go in a negative way as well, but I like to think about the positive possibilities in there. And I think being able to more personalize education through understanding where people are at and then adjusting the plans and giving people the time they need and kind of guiding people and supporting them along the way. I really feel like AI. I've spoken to some people in the community who are involved in creating next generation sort of educational AI platforms, and I really think the future is bright there especially for neurodiverse children.

### **Lauren Clouser:**

That's some good news. And that could be a whole podcast episode on its own AI and education.

### **Dr. Jeff Karp:**

Yeah. Yeah.

### **Lauren Clouser:**

But I agree with what you say. It's absolutely heartbreaking. I mean, a lot of the stories that we hear are people, from their early childhood being told that they're not good enough, or similar messages. And I don't think necessarily, people realize how long that can stick with you and have an impact.

### **Dr. Jeff Karp:**

Yeah. And then on top of it's like the digital culture is amplifying. You know? And it's really preying on, again, I don't think it's intentional most of the time, but it's preying on the neurodiverse, especially children. Right? And I mean, adults too. And there's just so much overwhelming information coming in, and it's almost wiring us for our attention to be even less than where we are, the baseline of where we start from. And I think that if you're neurodiverse or



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you have ADHD, whatever it is, it's almost going to make it even more difficult to fit in within these rigid structures of school systems and companies. And so I really hope that these new models happen quickly because it's really becoming more and more problematic every day.

### **Lauren Clouser:**

Yeah. Definitely. Well and before I let you go here, I wanted to ask, just a little bit more about your session. Without giving too much away, can you tell us what we can expect from your session at our 62nd Annual Conference in Orlando?

### **Dr. Jeff Karp:**

Absolutely. Well, first of all, I just want to say I'm really excited about this session. And it's one of these things where I really didn't speak about my challenges and my struggles for many, many years. And, you know, other than to advocate for myself to get the extra time and resources, I I kind of kept it all within. And when I started writing this book, 7 or 8 years ago, and started to really think back to the times, you know, because there were a lot of painful sort of moments in my life. And I really felt it was important to relive those and I really needed to tell the story and share the tools with others that I developed to survive and then eventually thrive. And I'm just really excited to have this opportunity, to, really for the first time just to take the stage and and share my story and the details and just share all the the key insights that I've gained throughout my life that have been really foundational and instrumental for me to understand things, but then also tools that have helped me to live with the wiring that I have and to really deepen connections with other people and have great social interactions now with others and to be able to be more efficient in what I'm doing and to maximize creativity and lead with curiosity and maximize innovation. So I'm just really excited to share all those insights and, I just thank you so much for that opportunity.

### **Lauren Clouser:**

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