Introduction and Speaker Background

Welcome back to the Reverse Alzheimer's Summit. I'm your host, doctor Heather Sanderson. And so excited to introduce you to Doctor Nate Bergmann. He's been passionate about proactive, preventive and participatory medicine since his days as a research fellow at the NIH.

He completed a fellowship in geriatric medicine at the Cleveland Clinic, with emphasis on aging the aging brain and body. Prior to his current position at Kemper Cognitive Wellness, he co-developed the Cleveland Clinic Center for Functional Medicine's Program for Cognitive Impairment.

Nate remains curious about the incorporation of personalized data collection, computational tools, and other technological advances to assist clinicians at the bedside.

Nate encourages his patients to deeply invest in their own health, and wishes for each one to be the quarterback of their own movement towards greater health and wellness.

When he's not in the office, he hosts and produces the Evolving Past Alzheimer's podcast and enjoys time with his wife and their five children. And I can just say, I tune in.

I subscribe to the podcast and get tons of value from it. You stay really busy and also very on top of the latest research and what's going on in the Alzheimer's space.

So thank you so much for taking some time to join us. Oh, thanks for having us again. So you're still seeing patients at Kemper Cognitive Wellness right now and what what are kind of the most critical pieces?

If someone comes to you with cognitive decline or if they're looking to improve, which I hope they are. They show up in your office. What are some of the biggest pieces that work most consistently for the most people?

Yeah, so it's a good question. Yeah. For sure. We still see patients. I mean, we're always seeing patients I help you know, I think as soon as people is as soon as a clinician stop seeing patients, that's when they have all the answers.

You know, you don't have the humility of working with real human beings with real problems, right? Yeah, it's all theoretical at that point. Yeah. So Kemper cognitive Wellness in Cleveland, Ohio, in greater Cleveland, Ohio.

Yeah. In general, you know, like I call this kind of the summary of knowns. And this is a, I would say this is sort of an amalgam of peer review.

Core Strategies for Cognitive Improvement

And then I would say like observations from people like myself, like yourself, you know, just working with, you know, I have organized a fairly large group of clinicians at this point, with like where we do online meetings and online comments about, like, what's working for people.

And, so that's this, this is sort of a summary of some of those things, like many of those elements, in general. Right. And we go and we try to follow an evidence pyramid, starting the things that are most evidence based and evidence in court.

And then kind of working our way into things that are more esoteric and functional medicine and kind of alternative or integrative medicine space. I know you've had other guests speak about.

So I would say the first, really the first and maybe the I don't say it's the most important, but it's to act early right there. Earlier or things are known earlier.

Symptoms are attended to typically the better and more spectacular the results. Right. Like you getting things cleaned up. But I would say in our experience, we need a lot of people that are kind of further along that are further along.

So people that are losing with Alzheimer's, that are losing their ability to stay independent, they may not be able to drive, they might not be able to remember, take medications.

It's certainly, you know, further, further on down all the way to needing nursing home placement or hospice in some cases. And so I think most importantly, engagement.

So purpose, right, when it comes to these kinds of programs that, that that so many of us are working with, functional medicine principles, lifestyle principles to start, it really requires, from a patient or, you know, a family that's coming to see us.

Why are we doing this? What is their purpose? What is their purpose? And sometimes I would say, one of the things that we've learned really, probably in the last year, year and a half since the last time we talked to you and I have talked to other is like it is possible through the same kind of paradigm is, is is iterative change happens.

It's possible to take people from a lack of sense of belief that they can do anything about this, to that they can. And then sometimes that infuses purpose, right.

So for example, we're working with a woman that we started working with last summer, around July 2021. When we saw her, she was just getting a diagnosis of a neurodegenerative disease, wasn't Alzheimer's, but it was kind of similar.

And, she worked with us for six months, and then she joined a program that we have called Brain Fit, which is, you know, couple hours of, different kinds of mental and physical exercises, topologies and things.

And, she's worked really steadily. And when we started with her last summer, we said, hey, let's call her Mary. We said, hey, Mary, what's your goal? And she we have a goal. She's living alone.

Still fairly young, like, still fairly young. And, and it was really kind of scared. Doctors are scared to lose independence. But we have. You don't have to, like, have.

What is it that someone is doing this work for it, right. Like, obviously. And, you know, some people show up to work because they need a paycheck for this group of people.

I don't have to tell you, but, you know, for for our listeners and people that are watching this, it's like, if someone doesn't have a reason and it may be inherent, I just I want to always get better.

I want to have, you know, I have better brain function. But but why? And getting into that I we're spending more and more time kind of digging into that because that is one of, I would say, one of the secret ingredients or secret sources and of, of getting people kind of activated, moving and, and over time, the more that we kind of work with this, it seems that I think the thing that's surprising is that times people will surprise us, people that don't really have a clear purpose, like Mary, we said she wants to go on a trip to Europe, to Germany.

That was rarely her goal. And into, I think in in four weeks she's had it out, right. She's improved her cognitive scores improved remarkably. Her if her just her physical, just her physical self, her ability to feel confident independent has changed significantly.

You know, and the scores that we measure on her. So it's like, those are the kinds of things that the more she kind of sunk in and said, okay, I want to do this.

I want to get up for this, you know. So she's going with a group of friends, to Europe, Germany amongst them. And, you know it. Those are those are exciting things.

Those are obviously those are those are the things that say, that's the first thing in terms of what we think we know. Another one seems to be that for many people, but not all.

And that's an interesting maybe conversation, side conversation, like a sort of rescuing brain energy, with some trend or period of time. In ketosis or a ketogenic diet, whether it's nutritional ketosis or people are using some kind of powder or pill or liquid, outside of just regular, so just food, kind of supplements or, excuse ketones to get people into ketosis to sort of rescue brain energy.

Interesting. We've had some we've had and I'm curious to hear what other people are seeing as well. We've had some kind of quick results with those. For some people, especially if they're coming from a place of maybe a suboptimal diet, the standard American diet, for sure.

But even sometimes people that are kind of eaten, vegan or, you know, kind of a high vegetable, low protein, a little lower fat diet, you can get some pretty quick results.

I believe I'm believing right now that the mechanism might be probably neuroinflammation. Can say for sure. Kind of depends on the choices of the and the ketogenic diet.

But it's pretty, it's pretty interesting like to see people like getting results in like 2 to 4 weeks, where they're really kind of noticing a difference with cognition.

So that's, you know, it's, it's, it's something about kind of old news. I think what's interesting is to see then how long do you continue that out? Do you drop people into ketosis every once in a while?

Like, we're, working with one guy who had also had a nice result, in his 80s, diagnosed with Alzheimer's and now sort of a shifted into an Alzheimer's, diagnosis classic, you know, short term memory loss.

And here's the parts of his brain on his brain. Scans are small. They're sort of classic for, you know, traditional Alzheimer's disease. And, did a period of ketogenic diet slipped out of it?

Now it's kind of shifting back into it. So, you know, it's not, it's not like, it's like a long term lifelong commitment to ketogenic diet. So it's interesting that, you know, to see people sort of pop in and pop out, and sometimes people lose track of that.

And, it's easy to lose track of because it's, it's it's a hard thing. And I anyways try to ketogenic diet. It's hard thing to sustain that you can you can get kind of a fast result and that's it.

It's really exercising with intensity. So that's that really is a sweet spot. You'll see. You probably know every once in a while it seems like every couple of years, British Medical Journal.

And there was another one. This, is the end of 2021, beginning of 2022. There will be an article saying that, like too much intensity, doesn't seem too much intensity of exercise, does not seem to help people.

It makes people with dementia worse. Particularly Alzheimer's dementia. But some of these, the British Medical Journal on this for five years ago, wasn't specific as to what kind of is this all cause dementia.

It's hard to know. So it does seem, though, that a couple days a week, like a couple days a week of something that's more intense than someone's usual.

So getting heart rate up, working muscles a little bit harder, and that's going to be, that's going to look different for everyone, obviously. That is that's that's a, that's a recipe for success.

But it is also possible just with Alzheimer's. Just like sort of everything else, to kind of overtrain to overtrain. And so that that's just one of those ones that just for someone who's kind of further along on that Alzheimer's journey, maybe they have a later, you know, they're, they're in, mild cognitive impairment, Alzheimer's kind, or sort of a true Alzheimer's dementia where they've already, maybe lost some ability to be independent, figuring out how much you know and how intense.

It's easy to say exercise with intensity nearly every day. I don't think that's going to be, that's not the sweet spot for every single person, right?

There are other aspects in other areas of the body's brain that need to be trained. And I think you had a couple people talk about that as well on the side.

Next. Now the next one's obvious, but needs to be attended to because it's kind of rising up, you know, so one eight and one D in terms of, evidence within Alzheimer's disease is fixing sleep issues.

Right? And that might be starting with something like insomnia or sleep apnea. And so we're super aggressive looking for, those issues, treating those issues, you know, sleep cycle, sleep, sleep, sort of circadian rhythm disorders are common in the population.

And that's of course, still, it's kind of a chicken and egg question. Is it Alzheimer's that causes the circuitry and rhythm disruption, or is it's repetitive within the dysfunction that's portends Alzheimer's?

You know, I think the truth is probably going to be somewhere where it's somewhere in between. If there's a the anti symbiotic relationship between the two of them.

So, pushing and pushing really hard, because sometimes you fix sleep just by itself. There's a pickup in cognition. Just as a sort of a minor intervention.

That's the only thing people do. Dental issues, which I know you're talking about as well, natural juice and sort of inflammation in the mouth, periodontal disease.

It's another thing that makes a big difference. And then, like everything else, you know, technologies, hormones, detoxification, infections, things like that, immune system function, all of those things are sort of, I would say secondary to the, to the, to kind of the big ones, the big ones, the one I'm most curious about with the kind of least data and I don't know if you have any that speakers or new notes yourself on this one is, is sort of the toxin bucket because that's one that's hard.

All these things are hard to quantify.

Why the Term 'Reversal' Is Controversial

They're functional medicine, rabbit holes. But but there's I mean, there's definitely big time links, that are accepted, you know, all the way through American Academy neurology.

Just no one knows how to measure these things, consistent way. And no one, really, truly knows, in my opinion, at least, what to do about, I think we have all of us have sort of strategies about what we think is probably the best thing, but I don't know if you've ever seen I've seen certainly I've seen a couple cases where people got worse cognitively with detoxification.

So it's one of those like proceed with caution, or at least be working with someone who's who's has some experience taking, taking, taking this journey with other with other people that have the same kind of diagnosis that make sense.

Yeah, absolutely. That's a great rundown, very efficient. I feel like that should be the the required reading for the required, listening for everybody starting off this, summit because that that was a great just like snapshot into

everything that we are discussing this week. So thank you.

You know, let's get into one of the other big pieces. This skepticism around the term reversal with dementia. So when I think of it, you know, this doesn't necessarily mean cure.

There are people with severe dementia who will never go back to work. However, I have also seen miracles happen where we see people with severe disease get a little bit better and then improve their quality of life.

I've also seen people with, like you mentioned earlier on and the severity of the disease and the progression of the disease, and they tend to be younger in their 50s and 60s, and in six months, I mean, they have no more cognitive issues.

It can be miraculous, and, and really worthwhile. And yet there are also people who still say there's no such thing as reversal. And we certainly have people sign up who do not get better.

And, and some that get worse. Right. Continue to progress and get worse. And so there's a mixed bag of responses. Where do you perceive the skepticism around the word reversal and Alzheimer's comes from?

Yeah. I mean, so I have my vantage point was, was kind of formed and fashioned in, in, iron sharpens iron, kind of an environment, like at the Cleveland Clinic and there you couldn't, you know, you couldn't just make a claim you had to come with some kind of graded evidence.

And that's, you know, I think that's that's a good, good thing in general for all of us human beings. But we patients. But I think it's a good thing for the kind of the patient community, because there's there are a lot of people out there that will that seem to be able to claim a lot of kinds of, of evidence and even people, you know, was 5 or 6 years ago were co-opting somebody like Dr.

Verizon's work who had written a paper in 2014 reversal kind of fine. That was sort of what started him and started like, started a lot of us. And certainly for me, that was really what made me pay attention to, well, we can take a very kind of precise, dive into a lot of things, a lot of areas that kind of drive Alzheimer's disease.

And that was early on. I mean, it was like a high powered. It was like a medical hypothesis paper, where he had a several year, ten people. Then it proved right, basically following these principles.

And, you know, shortly thereafter, you're getting emails from people saying that, you know, that there's, you know, that that doctor, doctor deal, but doesn't prove his proven that you can reverse Alzheimer's.

It was just like one of these, like, like the like things got carried away too quickly. And so what what happens in a place like Cleveland Clinic? And I, you know, talk to, you know, cold, serious scientists all over the country in some around the world.

And, it brings sort of like, undue or unnecessary skepticism to this sort of the sort of approach that that it's being talked about in this summit, where there's so much good.

And if we're just I think if there's just sort of a more of a, of an honesty or a transparency about the kinds of results people are seeing and what it takes to be a patient and all that kind of thing.

I think we'd have less criticism in the meantime, you know, not the Cleveland Clinic, not Mayo Clinic, not Johns Hopkins. None of those other commercials lead with the failures, right?

None of them lead with, the failures. And you can read Martin McCaffrey's you can read plenty of plenty of people that have worked in these kinds of environments.

We'll talk about, you know, the realities of the hospital itself. But I think mostly the issue is in terms of being honest and transparent about our about our, outcomes and then being honest and transparent about the kinds of

approaches that we're using as opposed to being sort of ashamed or, of them.

I think a lot of people don't, you know, I don't know how exactly to look for toxins or what's the story with mold or Lyme disease. And I think it's I think it's fair to say we're not sure.

And I think from an academic standpoint, if you're well, you know, Lyme, there's no connection. I've had so many I'm sure you have had to of people who go to the neurologist at a, you know, these famous places, famous institutions, and they'll be like, well, that has nothing to do with Alzheimer's or, you know, and then five, six, ten years ago, you know, five, six, ten years later, it's like, oh, really?

It did. But by that time, the patient who who I'm seeing and you're seeing now might be long gone. Right. Because the the academician didn't just either didn't have time, didn't have the interest, or wasn't as sort of as far down the rabbit hole with some of the, the kinds of interventions we're talking about.

So I think transparency and choice are for patients. And then us being diligent about, how we collect data and the kinds of research we're involved in, and all those things are important.

But the meantime, like, people are sick and people need help and we need to help them. And it's sort of all hands on deck. So, being transparent and then just, you know, just spending the time to develop relationships with, academic centers and, and skeptics.

And I put myself in that sort of skeptic camp, because at this point, you know, I think 3 or 4 years ago, people didn't even approach. I didn't sort of even give the I metabolic approach, you know, lifestyle, exercise, diet.

So it they wouldn't admit that that had anything to do with an improvement in culture. I mean, we're talking like we're not even told me that long ago in kind of like 2018.

That was still like, a controversy. 2019. And now it seems like, you know, Alzheimer's research, everybody's kind of talking about brain health. And, you know, you're not I mean, definitely following this for a good ten years, this, this, this area. And, you know, it's not forever, but it's pretty close to you for about ten years.

And it's really interesting to see the shift in the last four, four years or so. So if that's the case that well, then why wouldn't other things that we're talking about that are coming down the pipeline and maybe, maybe there's some, some truth to that.

So I think we need to kind of parlay some of the success and the metabolic approaches, that are now pretty widely accepted. And, you know, ideally programs, academic, academia, sort of famous academic programs are starting these kind of metabolic, metabolic diseases, approaches for Alzheimer's and then Alzheimer's precursors, anxiety, depression, bipolar, instead of all, like, mood disorders, like it's, like it's a big novel thing, you know, you and I, you know, kind of learned about these things and, and our training.

And I've been practicing them for a decade or more. Yeah. I'm curious. I'm putting you on the spot here because we didn't talk about this before, but have you heard of this book or have you read How Not to Study a Disease?

The Alzheimer's Story. Carl herb, I can see it. Yeah. I don't know if you've got your hands on this. Yeah, I got a I got to read that one. It's a good one.

You know, it might just be because we're Alzheimer's nerds, but, I mean, I read it cover to cover on one claims, like, because it was really fascinating.

It's an engaging story. Lots of detail about he. He's a researcher and lab researcher and the dementia space. And he just talks about kind of how we came to this being stuck in this dead end rut of the beta amyloid plaque hypothesis with so much effort and time and ungodly amounts of money being thrown at this disease that we all realize is, you know, radically shifting right now with the demographics and really a huge detriment to society.

If we continue down this path and yet we we've gotten stuck in this looking at barking up the wrong tree, basically. And so how to get out of that, how to unwind some of these bad decisions that basically got made along the way where we kept doubling down on this one hypothesis, when really it looks like it's a multifactorial disease.

So I think everyone probably agrees. Right. But amyloid plaques and proteins have something to do with dementia. But how much do they have to do with Alzheimer's?

Dementia and and what else? It needs to kind of get brought to the table when we have these conversations. So I'm curious if thoughts about medications coming down the pipeline about these hypotheses and kind of how you make sense of it all.

Yeah.

Medications, Amyloid, and the Limits of Single-Cause Thinking

So, I think in general, like I the more I read about, okay, I'm happy to work in a, in a hospital system, like, they're, they're good, they're generally speaking good places, but they're businesses, right.

And so I think, I think that I think when critics attack, a natural empathic doctor or, MD who's in private practice, who's practicing at a cash based practice because they cannot keep their doors open if they took insurance because you simply can't, you know, can't see five, six people a day and make it an insurance based practice.

Unless you're selling something else and people levy criticism against the cash approach when they themselves work for an institution that as a physician, they've completely outsourced.

You know, this wasn't the case 25 years ago. Most physicians, 30 years ago, 25, 30 years ago, even, you know, basically since the late 1990s, prior to the late 1990s, were owning their own practice.

A lot of people getting very wealthy, just doing kind of usual care. And now, most physicians, nurse practitioners, physicians assistants, maybe, maybe, in the West Coast, maybe even naturopaths and are sort of working in a health care system.

So they've outsourced all of the billing, all the costing. And I know if you go to a place here in Cleveland and you don't pay your bill, first of all, you're not getting in the door without insurance or you're not getting a test unless it's been, you know, there's been a prior authorization and then even if you're issued a few, two weeks late on a payment, those papers are going to collection.

So nobody's doing this for free. And, it's just I think that there's again, it sort of there's this partition or separation between the individual who's the customer, the patient as a patient, the, physician and an insurance based model.

And then, you know, it's sort of third party payer. So this idea that everybody that's that's sort of not charging it being is, is, is is doing the right thing, I think is completely, I think it's, it's an ignorant perspective, but it's a misinformed perspective because, they're just not aware that all this stuff is happening at the same way on the back side.

So with that sort of like skepticism about medicine and the medical community. Right. Like at the same time, knowing that there's extraordinary people and extraordinary scientists and security individuals like, in these fields, we take, okay, what what are the medications that are coming down the pipeline for Alzheimer's?

Right. As of this recording, like when we were, I think last year when we were talking about this, as you can remember, Allergan had to have just been approved.

And then recently, Medicare decided they're not paying for it except within the context of a trial, because, you know, all the reasons it'll bankrupt.

I mean, all of the reasons it didn't help already. It just didn't help that much. Seemed to slow things down a little bit, which if you're early stage, sounds pretty good, you know, if you're if you're trying to make it five more years till your last child gets married or something like that, maybe that's a good, maybe that's a reasonable approach.

But the, the idea that that's what's true and all these other things are not because they haven't been sufficiently studied because nobody wants to do the study.

That's not, that's not that's not fair. Right. But the medications coming down the pipeline, the things that are sort of as you catch an average income, like, like, the kind of ab like, they call in 2401, or any like there are other other medications that are in the same class as those, as the original as the, the one that got the original approval in 2021.

Like they say, they're going to work better. They you know, people that I've talked to that are in these clinical trials seem to feel like, you know, these are, they're an improvement over the original ones.

I do think that we'll have like, this kind of, chemotherapeutic, approach to, to Alzheimer's. But it goes back to what you said before. However, I think it that still fails to recognize and I in that but it still fails to recognize that there's not like one mechanism for Alzheimer's.

So, yeah, you could you could put the you could put the stop and start to eliminate some of these amyloid beta. But hey, why is that? Why is it happen to begin with?

And B, what are all the other kind of, elements? And just like, like, like I could definitely envision a day where, like, everybody's on an Alzheimer's medicines for, like, everybody's on, statins, you know, like, if you have a high amyloid, you get the blood test.

And if you have amyloid of this and you have this risk of this age, you'll be on an amyloid medication, and you probably won't be in the days of IVs, but it'll probably when they have an oral pill for something like that and it'll be on a combination.

But that's to me, talking to the sort of the amyloid guys in the, in the field, they're like, well, if you don't think, amyloid has anything to do with Alzheimer's, then you're interested in Alzheimer's, right?

Sort of like saying if you don't think atherosclerosis or, you know, the plaque that builds up in, in most people's, arteries with heart disease doesn't have heart disease, and you don't know what heart disease.

So that's a fair statement. But it's it's true. There's also there's also a lot of data that suggests that that's not a fair statement. Right. Because less than 1% of the population, in the entire population on the planet, no matter how old you are, has no beta amyloid plaque in their brain.

Right? So, like everyone has some beta amyloid plaque and over 65. So elderly people on the planet, people over 65 seniors on the planet, 30% of them, regardless of their cognitive capacity, have enough beta amyloid to have a diagnosis of Alzheimer's.

You know, people with perfect cognitive function who have plenty of plaques and, you know, plenty of plaques and tangles in their brains when they die.

And so, yes, there's a connection, but it's not predictive of cognitive function. Yeah. Yeah. Well, I mean, it's sometimes it's predictive function. But like you're saying like it's such a myopic, when it just it comes back to, well, we didn't we have the answer.

Come to the hospital for your answer, but we can fix you and and it and it reduces the, the idea of Alzheimer's. And it's hard to even get a clear consensus of what Alzheimer's is, because a lot of people that have been, diagnosed with Alzheimer's, probably they may not have Alzheimer's or they probably have.

I'm more convinced that probably people have a lot of mixed type dementias, whether it's late or it's a little bit of Lewy body, you know, sort of a Parkinson's kind of a thing, vascular, like like, I do think, though, we're going to get we're pretty close and we're, we're getting to that point where we're going to have drugs that are approved for Alzheimer's.

And then, you know, then for sure they'll have all the answers. And then once we have an approved drug, then all the other sort of approaches, that means that none of them are true, right? I'm just joking.

I'm saying that this is just like, but I'm actually I look forward to the time where we can combine medications with the kinds of approaches you and I are talking about today.

I absolutely do as well. I think that there's a great complement potential there. Right. If we can get rid of the why of why are these plaques and tangles being formed?

Why is there inflammation in the brain? What does the brain feel like it needs to protect you from protect itself from then we can do that first or at the same time, and then get rid of the plaques and tangles.

They almost there like scar tissue. Right? There's been some damage done and we want to get rid of that. Of course we want full healing. Yet if we don't get rid of the reason why they formed in the first place, we're not going to get an improvement in cognitive function, which is the whole point of these conversations. Right?

It's making sure that that person has a better quality of life, better experience, better cognitive function, not the amount of amyloid in their brain.

Totally. I mean, like if it is, since again, just to to sort of and add more fuel to the point you're making, if you took most Americans 40, you know, 40 and up off the street, you just did x rays on their back or their knees, nine out of ten I'm going to have arthritis fighters, but they might never grace.

Same thing you take with the neck or heart, like a lot of people have build up. It's just not going to be symptomatic. So for sure. Yeah, the point about amyloid and just like taking amyloid out point well taken.

But you know, biogen's on it. So there, you know, like there's a lot of people that are, really invested in, in simple models. Right? Right. Well, let's go back to our more complex model, because just because it's challenging or complicated doesn't mean it's not worthwhile. Right?

What does, kind of like a rehabilitation process, if you will look like, for somebody who's already suffering with some cognitive decline? Yeah.

Rehabilitation for Existing Dementia

I mean, I think, I think for the most part, if it's probably been well laid out by other guests, other speakers, rather than, Doctor Perlmutter, I mean, there's there's, there's there's plenty of people that are, that have the answers to that, that, you know, I just keep repeating what they said, but I, I think what's, what's kind of new and interesting today don't hear is talked about as much as this, for people that already have dementia.

Right. So for people that already have dementia, meaning they have gotten lost and they've lost the ability to be independent, complete, you know, completely independent on their own.

There's a lot to be done. And we're calling it, you know, live well with dementia, living well with dementia. And, it's an interesting, process right now.

So that's the whole field of cognitive behavioral cognitive impairment is how much skill can can we get back? How much gain can we get back even in someone who is, at a, at a real deficit and a real life lesson circle in sort of a catastrophic where a huge amount of cognitive loss and, I think an ideal approach is going to include some of the mental and physical, exercises.

But, I mean, but we're doing, where we are, you know, we're really specifically teaching people, we're doing exercises that will improve, verbal memory, visual memory, processing speed, even the ability to attend to pay attention, which can improve memory.

It can pay, it can improve, executive function. All of these are inputs. So like, if you're training cognitive skills, cognitive domains, we'll often see the general general trajectory of people's, let's say just their scores or how they're doing in life, or you ask a care partner, how they're doing.

They'll be doing the same, if not better. Right? So it's, it's like it's one thing to see someone who's my, like, my first patient tells me you mentioned, like, the kind of person mentioned early 50s or early 60s.

Mom passed away with dementia, and, you know, long term care. She started having real sort of concerning symptoms, started on program, snaps back, gets back.

You know, like she's just back to herself and and I mean, it's those are extraordinary. Those are exciting. But it's also it's extraordinarily exciting in some cases, it's kind of almost more so, because it's even it's it's not supposed to happen even more where someone is, like you mentioned, very, very symptomatic and much further along.

And they start to have a stabilization of decline, and then they start to have, you know, maybe some days or better where they're aspects of their life that are improving that are clear, they're, more able to articulate, what they're doing.

They're better with math. They can calculate just like wild stuff. We can just see the brain, like sort of higher cortical functions, like sort of higher cognitive abilities start to sort of like come back online.

But it's not all the time. It's it's really, it's just enormously exciting. So I think, you know, I think really being specific about, that cultivation of purpose and spirit cultivation on why someone would challenge themselves like this and doing, doing the right kinds of mental and physical exercises and then complementing that with diet and supplements and sort of all the other things that we'll do, sort of sprinkling in technology that can accelerate the process here.

It's it's, it's the most exciting. It's I mean, among the most exciting things that I'm involved with on that kind of a day to day basis. Yeah, I can, I couldn't agree more.

I mean, just hearing hearing you kind of explain that you're seeing similar things. Because sometimes I sit here in my office, you know, in Southern California going, gosh, like, how am I the only one doing this?

Like, this must be happening in other places. And just to hear that the same stuff is happening in Cleveland, it just it's like my my heart is just so full because it means that we're not, you know, we're not mistaking what we're doing.

Like, this is real. And it just adds more credibility to it. And it definitely gives me more hope. And I think just letting everyone know, you know, that, yes, of course, we need more science.

We always need more science. We always need more data. And it's coming. We've finished our 25 participant trial. We're going to publish that soon. I wish that it was ready to go out right now, and I could talk about it all day long right now, but alas, I have to wait.

But I'm really excited to get that data out there. And then we are going to do a follow up child actor Edison is working on a follow up child to his first 25 participant, trial.

They're going to do 100 participant trial. So this is all happening. And the context of that is like, why did it take so long? Right. Well, for a long time, if you weren't studying amyloid, you weren't studying Alzheimer's. Right.

So everything was going in that direction. And then also what we are doing is multifactor trial. And so getting an IRB or an internal review board to approve that, there's been funding for quite a while through philanthropy.

A lot of people have realized that this there was this was worth looking into, and there were people willing to fund it, but there weren't IRBs willing to approve it.

And to do human research trials. You have to have an IRB that'll get behind you. And so now, just in the past five years and maybe in the past 45 years, that's why we're seeing so much shift.

So we're more focused when we look at this hierarchy of research, we're starting to shift our focus towards more patient centered outcomes. And that that means including trials that have multiple interventions at the same time. Right.

This this idea is that if you stack things like you've been discussing detox and diet and sleep and, you know, oh, and exercise, of course, if you start putting all these things together, then you would expect to get even better outcomes than if you just do one and there's this spiraling up or this, this, what am I trying to say?

This, like, when there's this momentum, this virtuous cycle that you get out of stacking these interventions. And so, yeah, I think that that is one of the most exciting things happening right now in this space.

I'm curious, what else, what other exciting trends you're seeing. Yeah. I mean, it's a good place to sort of round out the conversation with, I mean, oh, really?

Honestly, the most exciting thing to me right now is the sort of stabilization that we see with people that already have a diagnosis that are willing to put in to work.

That's really cool. You know, keep trying to keep people independent and keep them out of a long term care nursing home. Whatever you want to call it.

Is exciting. It it really requires people to put in the work. And I think we're seeing more people. We're seeing definitely a fair number of people that are kind of willing to put in the work.

They kind of understand, okay, if I want a different option, then I just going to go to a hospital and get an injection once a month. Which would be great.

You know, I think everybody wants to do the simple option. That's number one. I see people stabilizing. To the right kind of therapy. Right? The right therapeutics.

Another thing, that we see sort of, a signal and I can tell you one, one impressive story that we had recently, this whole kind of field of electricity bills.

Right? So that that can that electricity bills could mean anywhere, anything from sort of like a neurosurgeon opening up someone's brain, putting in an implantable device for, let's say, a deep brain stimulator for a commonly approved for a Parkinson's tremor that will reduce the severity of a tremor.

But there have been, devices that have deep brain stimulators and, that are there have been big, big trial failures and a big industry sponsored, trial failures so far for, for deep brain stimulation and Alzheimer's disease.

Well, noninvasive brain stimulation with transcranial sort of electrons, transcranial electric light therapies, does have some promise. And and these are, they're tricky.

It's a tricky study. They're tricky studies. And they're mostly small and short, but I've talked to three really serious, neuroscience researchers. I just talked to a really interesting guy at University of California, San Francisco.

Although he works, apparently in memory. Works full time, like remote. And he's a full professor, at UCSF. But, but, you know, going to another brilliant guy, mid-career, Ted Santos and, and, we're just kind of comparing notes like he's interested in direct current stimulation, alternating current stimulation.

And I'll sort of, you know, a number of other things. And I would say, we're, we're, we're adding in treatments or small amounts of either light or electricity to the brain.

So just to make this real for people, so we had a woman in her late 70s, let's call it, let's call de so we saw the, she's late 70s. She's got a gene for us.

She had a baby for a copy. Dementia runs in her family. She had PTSD, PTSD, pretty significant, anxiousness, probably. You know, what was would have been called, you know, ADHD.

Now, she was taking stimulants in the 1970s, for it, and and anyways, we see her and she's trying to live alone. Her son's trying to do the best by her to get her in-home care, but she's belligerent and angry with, care staff in her house, and they keep trying to.

They're trying to lose, you know, they keep losing people. And, she won't get up. She won't exercise, won't participate in physical therapy. She needs knee replacement, but they don't want to do the knee replacement because she won't do physical therapy.

And she'll just she gets the surgery and doesn't do it. Then she's, she's going to be she's going to end up in a chair their whole life, right? The rest of her life.

And, so we started off with her and, you know, we try to get her to do many, many things, you know, all the all the stuff she was not having. It was like a tough Italian lady. She's not having it.

And, and but she, you know, she was a good sport about things, like she was she, but she didn't always remember. She was, she was just to give you a sense.

Heather. Her mocha score. How much? Coco Sessoms was 13 with a lot of loss. And so that's a fairly low, fairly fairly advanced. She could still have a pleasant conversation with you kind of know who you are. And that was.

No, there was no issue. But she wouldn't do to engage just wouldn't get out of bed, couldn't get dressed. And in the course of, in a month.

Emerging Tools: Stimulation, Psychedelics, and Patient Advocacy

So we put her this is one of those ones we saw kind of an immediate impact. She recently diagnosed with type two diabetes. So she went on, ketogenic diet, got off, I think almost eight.

She was just on that form and picked up all her other IV ideas, medicines really pretty quickly. And started, you know, sort of clearing things up. I started another prescription medication on her to sort of calm down excitation in her brain.

And then we brought her in and the only that's the only thing to get her to do those two things. And then, we we did get her in to come into the office a few, several times a week for these stimulations.

We used most of these alternating current stimulation with her with some, noise frequency, pink noise. But, and we, we try to kind of a few things until we found, you know, the network that we kind of needed to, to light up with her, the area network.

We need to light up with her and her mocha in a month. So again, normal should be 26 or above. Technically, hers was 13. Start in one month. Her. She went from 13 to 20. She.

But I mean, the scores are interesting, but like, it's just somewhat like you and I, but it's more about like, what her life was like getting up out of bed.

Ready for a care partner in the morning, eating, participating. Cognitive exercise is willing and able to let you know

the physical therapist in your house.

So like, her brain was organizing and and her. It was funny. Her care partner was, you know, this is not a clinical person. And she was more commenting on her mood and her mood and seeing so much better.

She just seemed so much more agreeable as her brain started to organize more. Right. And so, you know, you get rid of some of that inflammation and you start to, you know, like, like let the dust clear with all the blood sugar stuff and, and then you add some, hey, this is, this is sort of the rhythm and frequency that the brain needs.

Yeah. Let's be real. I'm more agreeable when I'm in ketosis. I don't know that everybody says that. I mean, some people, especially some some, you know, some pre-menopausal women I've seen that have had a really rough time, with, with a full ketogenic diet.

But, in general, like, I think most people feel like, a cleaner burn. So, I mean, that's that's what. So technologies are interesting. They're hard because, you know, people have to, in most cases, kind of come into the office.

There's some things, you know, it could be like there's some things that people can do at home. The other thing that I heard, I've heard this from, from really some very credible sources.

Do you know Robin Carter here? This is no Carter. Hers is is, is is is kind of one of the leading names in, psychedelic research. All right. He's kind of a hardcore neuroscientist and, you know, doing a lot of fMRI studies.

He was in England for a long time. He was so the University of California, in San Francisco just poached him. They got him. So, rumor has it that they may be, they may be, using, some of, whether it's psilocybin.

I'm not sure yet. But they there's talk from some of the people in that vein, that neuro state division, that they may be starting to use, psychedelics in hopes of sort of sparking things, from a neuroplasticity or neurodegenerative.

So neuro regenerative, a point to me, it's still kind of speculation. And I'm going to wait until kind of the craziness of the psychedelics group share everything, you know, for instance, we just somebody sent me, an article from Harvard where they were touting how exciting the psychedelics are and, and, and how it's, you know, it's it was it seemed like one of those articles where we're going to solve everything.

The psychedelics, which I hope we do, maybe. I know I would love it. That sounds like a lot of fun. And more than 85% certain that we want, but, I hope that we can, that none of us ever have to work again.

And we live in world harmony for peace, you know, and for for for for eternity, with psychedelics. But, preparing for the possibility that that's not the case.

I read this article, and it was like, this was like, hey, see, these things work. They had a it was a this was for depression. So it wasn't for Alzheimer's, but it just, you know, sort of speaks to the unknowns.

And in this sort of world of psychedelics, that so 30%, 30% of the people that with, with refractory depression so that bad depression, it wasn't getting better with other kind of, kind of traditional medicines, improved with psychedelics versus less than 10% control.

That's 30%. I mean, that's not a that's not 80%. It's not 60%. It was like 30% of people. So and I'm sure you've seen people that have kind of the, the the opposite effect.

Right. So I again, I think that it's, it's always going to sort of boil down to, are you treating the whole human being? Are you changing a whole human being?

And is this human being that you're treating? Do they want all human beings treat them right or they just want just give me the pill. You mean I'm going for the injection?

I mean, those options seem to that there will always be available, but the kind of the whole human approach, it does seem like, at least in some pockets, more than what was ten years ago, maybe even five years ago, especially in Alzheimer's.

There seems to be. Like a ray of sunshine of hope that maybe there's more openness to this. More there's more openness to this, that than than had been before.

Yeah. And then I think the other thing that's really kind of exciting is, you know, as unfortunately, more younger people end up with Alzheimer's, like the 35 to 64 population, as we know, is growing.

But the diagnosis is the cause of pollution is one, I don't know, but, you know, there's certainly all kinds of theories like that, as because of mitochondria repairs, because it I'm not sure.

But there because there are more younger people with this disease as opposed to it's, oh, it's grandma and she's in a nursing home. And, you know, like there's this picture of, like, Alzheimer's, of someone just like in a nursing home with their tongue out.

They don't recognize their spouse or they don't recognize their child. Which is certainly, you know, certainly still happens. But because there's been more younger people, there's like just more people that are just saying, hey, we're not going to take this lying down, we're going to fight, we're going to do something about this, are getting organized.

Right. So a little bit of like the Lyme community, you know, like sort of people that are going to take the with the chronic fatigue syndrome sort of people that are going to like, take matters into their own hand.

And that's exciting because, you know, so many times we felt like, oh, we have an answer. I'm going to build the prior, build the thing and take it in.

And people, people and I know what people need and, again, I don't probably have to tell you the number of times where we thought we had the answer and we took it.

And people that have more are closer to the problem. And give us feedback on it, as to how to make it better. It really been a, that's been a godsend.

So even just an organization like, the DX dementia, Alliance International, it's these are like, really cool patient, sort of patient or human beings with these, led organizations and, like, they're well, it's while it's still agonizing to see people with these diagnoses struggling with these diagnosis, the, the, the inspiration from the struggle, from watching the struggle is, is it is extraordinary.

And then I think there's also room I think finally just around, I think there's also more and more room. I know I'm starting to sort of be trying to figure out ways to naturally include this in the practice, and I and then sort of shy to do it for a while.

Although it's part of kind of the functional medicine matrix and model, is to talk more about spirit and spirituality in the context of these visits, because sometimes that's, you know, it depends on someone's obviously depends on people's backgrounds and what their, what their, sensitivities are.

And, you know, they have or, you know, they come from a sort of a Christian Catholic background or they come from something comes from a kind of another, background, but like, drawing on whatever people have or using the experience of, you know, the sort of Herron experience, usually that's for a cure partner of, like, losing like a spouse to this, can be a big opening and obviously a big, big opportunity for, a certain kind of growth.

So incorporating that in there, like just it's the sort of blows the whole thing up a little bit. And, and then we can start to focus on what you were talking about before of like choice.

And, you know, what are we what are we really doing with this and how much are we helping? You know, some people would call that sort of a patient centered, a patient centered approach and individual or family centered approach, for sure.

Well, you know, what are all the tools that we have? And here's what we have. Let me help you. With all of these many, many tools as opposed to just like the one medication.

So exciting times. It's it's very exciting time to be in the space or just blowing up all over the place. And, I appreciate for you for being sort of a mouthpiece for this, for this kind of work.

Yeah. I feel so grateful and privileged to, you know, be working on this project with you of changing the narrative. Right? This isn't going to be for everyone.

This approach isn't feasible for everyone, right? And especially right now, it costs money. You have to have resources. You have to have time. And yet everyone should still know that this is an option, right?

No one should be told there's nothing you can do because it's almost overwhelming. How much is possible to do. Now, that doesn't mean that everybody has to pick it up and run with it and do all of it, but for someone to be told that there's nothing when there's all of this.

So I think it's just I mean, it's it's inhumane. It shouldn't be legal, right? Yeah. It's it's just the refrain from neurology. And so thank you for doing this work with me of changing this story around what's possible for those suffering.

I couldn't agree more that the passion and energy and inspiration that comes from all of us who want to reduce suffering in the world, right? And those who are in the throes of either caring for someone with dementia or who have it, who are suffering themselves, then you know, there's nothing more amazing than watching a human transform that that tragedy into hoping and hope and hope for other people.

And so, I love that you kind of mentioned not that watching these organizations form where people are just like, okay, I'm not going to give up, and are looking for solutions and certainly we're looking to partner with them.

We thank you so much for taking the time. I know you are busy and your care. Your family is waiting to have dinner with you. So I'm going to you go screaming under the rabbit, no, no, I can't hear the screaming, but go join in the fun.

Let's not wait so long to connect again. It's always a pleasure. I learned so much from you. And like I said, it's just so heartwarming to hear that you have similar stories to ours happening across the country.

It means that it should be happening in every city in the country. And, and certainly we'll continue to work towards that, make sure, one more time, tell everyone where they can find out more about you.

Yeah. So we're at Kemper Cognitive Wellness. It's just go to Kemper wellness.com and you'll find it here. Yeah k k and k k MPR and Kemper wellness.com.

And we're there with up to meet you. Fantastic. Thank you so much. Thanks again for doing this stuff.