He Sold to Disney—Now He’s Revolutionizing Healthcare with A Scan | Andrew Lacy | Ep. 42 Transcript

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Introduction to Preventative MRI

We're all working so hard to build a better future. How do I even know I'm going to be around for that future when it arrives? I don't eat well, I do not exercise very much, and I am stressed.

I cannot sleep particularly well. The average person knows nothing about their health. Join us as we welcome Andrew Lacey, the visionary CEO and founder of Pranovo, with a passion for revolutionizing healthcare through advanced MRI technology.

Tune in to discover his insights on innovation and the future of preventative medicine. Talking about the scan, you guys have the ability to detect over 500 different conditions?

Yeah, these machines are big MRIs. In one sitting in about 45 minutes, we're taking about 1.3 billion voxels and we are able to diagnose cancer stage 1, aneurysms and about 500 other conditions.

What are some of the common conditions that you see frequently? Probably in the US, the most common is fatty liver. And when we find it, at least half the people don't know that they have it.

The average spine of a 25-year-old looks like the average spinal of 40-years-olds. Being on their phones the whole time and sitting at desks and so on, they feel totally fine.

But the question is how they're going to feel when they are 50 or 60. Oh, that's scary. We spend more than 80% of our resources on developing more cancer drugs and we spend very little on early diagnosis.

Your brain shrinks about 3% every decade. Now, how's your brain changing? Is it shrinking more than 3% or less than three percent? So you can start actually giving people a pretty good idea about what parts of their body they need to focus on.

Let's talk about the technology that you ended up selling to Disney. Well, that was we ended Welcome to another episode of a Healthy Point of View podcast.

I'm your host, Sam Tejada. And today we have a guest. This guy here has a lot of experience in technology. He's taken technology, has sold it to big companies like Disney, and he decided to get into what we do, health and wellness, more on the prevention side.

i had the opportunity to experience what they're doing, going to the business. and this is something that everyone has to listen to, especially all of my functional medicine doctors that are tuning in.

This is So Forward Thinking. Today we have Andrew Lacey, the CEO and founder of Prenuvo. Pre nuvo is, and correct me here, Andrew, is an MRI scanning prevention company, right?

So this is something, guys, that is so forward thinking. This one of the ways that you truly catch things early. Andrew welcome on the podcast. Hey Sam, it's awesome to be here.

Yeah, man. So I've had the experience to go into the prenuvo. But before we get into to the whole pre nuvo stuff, because I want to keep people like excited to hear this conversation.

Let's talk about you, Ben. Yeah. Like you have a background in technology and business and law and everything else. Oh man. Well, I grew up in Australia.

You can probably tell from the accent. Um, and eventually moved over to the Silicon Valley, maybe 20 years ago. I was fascinated by digital and online and all these new companies that were being created from nothing.

Andrew Laceyu2019s Tech Background

And I wanted to be part of it. So I sort of left everything behind. Yeah. Left behind my law degree. Uh, it was working in business at the time, doing well in a sort consulting company, left it behind and said, i want to go and build something myself.

And my first company was the very, very first iPhone-focused company out there in 2008, a few months after the iPhone launched. What do you mean by that?

What's that. Well, um, I just, am really fascinated by new emerging categories of business and, uh, the iPhone launched in July of 2008. And I remember in a September, October, a 16 year old girl in Paris, France hacked into her iPhone, not to do anything crazy, but to change the background on the iphone.

That's pretty cool. And she told other people how to do it and then it was all this little underground community of folks that were hacking the iPhone mainly to put apps on there.

And I remember meeting some of these people. I said, wow, this is kind of interesting. This could be a new thing. Um, and so we, you know, my co-friend and I, we started a company called Tapulus to go after this space and.

at a time when no one else was looking at it. You know, we went to investors and they said, you know if you're not building for Nokia or Blackberry, this is a bad idea.

And we said no, This is new. This something different. It's going to be a whole new market. So I think I'm now four ventures, I am working on my fourth company now.

I've always been attracted to these moments where you sort of see the world differently to what everyone else is seeing. Right, right. Awesome. So okay, so that was the phone technology.

So let's talk about the technology that you ended up selling to Disney. Well, that was, we ended up building a bunch of these apps. Oh, is that what it was?

And we were the number one app. We were on that app store top charts for months on a time. And, um, were we the first folks to really figure out how to monetize a mobile, not because we thought it would be fun, but because the financial crisis also happened that year.

Yeah. we had to figure it out a way to make money, to not go out of business. Unfortunately, and I say this, You know, very honestly, pretty much all of the ways that people are now hooked on mobile phone apps, we were experimenting with in the very early days of mobile.

We for sure weren't in a long run, the most successful at them, but you know free to pay free, to play in app commerce, advertising, sponsored apps. You name it, we were experimenting with it back then and just trying to understand what these engagement loops look like and essentially how to get people addicted to an app ecosystem.

And that's where we live in now. Yeah. I mean, so you obviously were always very focused on data, whatever data is coming through, looking at human behavior and all of that stuff.

Yeah. Yeah, wow. And, um, and sort of go forward 10 years from there, I had just sold my second company, Um, And it come back to the Silicon values in Europe at the time.

and I remember that viscerally waking up one day, feeling not great. Um. You know, looking at myself in the mirror and you know. thinking, holy cow, you know, we're all working so hard to build a better future.

How do I even know I'm going to be around for that future when it arrives? Right. You know? I don't eat well. I didn't exercise very much. Am stressed.

Don't sleep particularly well, by the way, I just described like pretty much the four characteristics of all entrepreneurs. Even the ones working in the health space, it's hard building companies.

It requires grit and determination. And I'd just taken my current for a service then. to a new sort of car shop. My car was asymptomatic. It was running fine.

I got back a 30 page report on every component in my car, the engine, transmission, clutch, you know, windscreen wiper fluids and everything. And that report had pictures and told me exactly where things were leaking and which brake pad was worn a bit more than the others and how my driving maybe was contributing to the fact I might need to get my clutch replaced a little bit earlier.

I go all this tremendous information about my care and look in the mirror, I had no idea. what was happening inside my body. And I just thought that was just an insane state of the world where we just know nothing.

The average person knows nothing about their health. So I went looking for answers and that answers led me to a radiologist that I was doing these scans.

That was the beginning of a company that's now Pranuvo. Why the name Pranuvo? It meant a little bit to us. It's hard to find a name that's not trademarked and you can get the website of.

I know that feeling. it meant more to ask than it means to anyone else. And, you know, since we've grown quite big, quite, we sort of grown as a company.

We couldn't change it even if we wanted to now. What does the name have? It was like, it just meant to sound like a bit like prevention and renewal and be like new.

And that was the whole idea behind the company. Anyhow, when I got my first scan, I just learned more about my health than the health system had told me my entire life.

And I wasn't dying, thank God, because I definitely was not looking after myself.

From Personal Health Wake-Up to Prenuvo

But what really stuck with me was a peace of mind of knowing that when had a headache, it was just a head ache, or knowing when it had been a pain in the stomach, so I ate some bad food.

And I just didn't realize until that moment how much of my mental energy had been in the background subconsciously thinking about the what ifs. Am I okay?

Yeah, exactly. And just kind of removing that just gave me so much energy and purpose to reinvest in other parts of I love that because it brings in more of like positive energy at that point because you're at peace of mind.

You know, one thing that you mentioned, you talked about the car, right, where it was asymptomatic and you brought it in for a diagnostic, just to check it out.

And one of the things that we talk about all the time at Likovita is looking under the hood, kind of making the same analogy there of looking at the head to really see if there's anything that's wrong.

Now, historically, when people hear MRI, they're thinking, well, there's got to be something wrong with the individual, right? an issue with your back or you have pain on your arm.

So we're getting an MRI done to check a particular body part or an organ because you are symptomatic. You are

obviously one of the first ones that are out here doing anything like this on the prevention side.

Is this something that you see really developing into almost primary care at some point? Yeah, I actually have a radiologist inside my business who says, you know, we're in the business of primary care radiology.

And like no one that quote, that phrase does not exist because radiologists, particularly MRI radiologists. So the technology we use being MRI, it's one of those modalities that is traditionally quite slow and therefore quite expensive.

Right. in say a hospital setting to figure out what's going on with your body. Right. So you might, let's say you have abdominal pain, you go to the doctor.

The doctor says, maybe this is diet, or maybe, this something else, make a few changes, come back in a month. You come, back things still aren't where they need to be.

Maybe eventually, they'll start pushing and priding on your abdomen, see if they can feel anything. It's a pretty crude test. Um, eventually might do other imaging tests for most things like X-ray or CT or ultrasound and eventually do MRI.

And it's cause it expensive. It's also the best machine out there. Right. So even the radiologists that we work with, they're not used to seeing early stage disease because they, you know, usually at the very end of that process, They're like trying to figure out, okay, this person has cancer.

How many parts, where has it spread to in the body? Man, I've never thought about it that way, because those radiologists, if they're actually now catching it early and seeing it, their job has to be a heck of a lot more rewarding if- 100%. They can save lives, right?

Yeah, and I see them. We have sort of channels that we use on Slack to talk and there's some of the radiologist channels. You see, them get excited. Oh, look, he's a pancreatic cancer localized to the tail of pancreas, completely operable.

Wow. And typically, a panic cancer would be terminal. Right. Yeah. And that plays out for aneurysms, for ovarian cancer, a whole range of conditions where usually you catch it too late or you suffer some sort of acute health problem.

This is one of the things with a lot of times, I've had family members and friends that get diagnosed with some kind of cancer and all of a sudden, when I sit down with them and I get the news, it's like stage four.

I start asking, what happened to stage one, stage two, three? Like, what's going on here? And that's the thing, it's disease hides very, very well. And this is why putting so much emphasis of doing certain diagnostics, doing the comprehensive blood work, not the typical bloodwork.

You go to your regular general practitioner, I'm talking about comprehensive work. Doing specialized blood for micronutrients, deficiencies, toxins, and obviously doing scans is extremely important to catch these things early.

I mean, again, back to the car analogy, what did my mechanic say? He said, well, if you want your car to last for 20 years, you should replace these fluids and fix these brake pads and do whatever.

And the same is true for our bodies. If we wanna have a long life and most importantly, a healthy life, the earlier we can understand what's going on inside our body, and some of that could be genetically, could just be you have, your genes might predispose you to deposit fat in your liver.

My genes may predispose me for brain volume loss. It might be our lifestyles and it might just luck. The sooner we, We sort of take the blame out of it.

As soon as we just understand what's going on, the sooner we can work on improving the trajectory of our house. Addressing, change lifestyle conditions, things of that nature.

So this might be a loaded question here. You're disrupting the medical field with what you're doing. And I know what that's like because I get heavily involved with things like that.

The allopathic traditional medicine world, what do they think about what your doing? Well, it's changed a lot when we started the company. So five or six years ago, you know, I had my experience and it was incredible.

And then I sat in the clinic and, and saw a hundred other people go through this. And they all had the same experience I had. They felt empowered. they learned things about their health that they may never have learned.

Um, they oftentimes at the end would hug me or the radiologist. I mean, I don't know you, but I have never really had to urge to hug one of my physicians.

You know what I mean? It was something really interesting and visceral. And then when we went to speak to investors, a lot of those investors had doctors on their investment committees or doctors that would advise them on certain investments, and we struggled to raise money to expand.

We struggled because the view of traditional medicine is if you are not symptomatic of something, you're generally healthy. Yeah. That's scary. You know, obviously I don't agree with that.

So. But that's, you know. And, um, and as a result, we have constructed this $5 trillion system that diagnoses things late and that spends about 4.9 trillion of that 5 trillion on therefore treating us for chronic disease.

Right. And the thing that people don't follow, and I think this is, if there's one sort of profound insight that I've had in the last few years, it's this.

That system that diagnoses things late has in turn created in us a fear about learning things about our health. Because if every story I hear about cancer is that it was caught at stage four.

Right. Why on earth would I want to undertake a test where I might get diagnosed for cancer? Because it's going to change my life. And so this is created this fear that people have and this sphere in some ways has perpetuated the late diagnosis.

So you sort of have to break the cycle. in order to like shift this health system to a much healthier place. Yeah. It's different when you have a positive story from someone getting some kind of diagnosis of like a cancer versus every single time.

it's just a negative, very like draining story because the outcome is not a. So, but when have the ability to catch things early where you can get it removed or do some other type of procedure to reverse it, then that's the positive outcome.

But, I mean, let me ask you a question, right? You did the scan. I did. You work in the health space. Right. And I work on the house space, and I've done now five of these scans.

But I still get nervous before every scan you do. Why is that so? And so my question is, did you feel a little bit nervousness before you went in?

Why Early Diagnosis Matters

So it was my first time. Yeah. So, yes, so I didn't know what to expect. Um, but, you know, I don't think the next time I get the scan I'll be nervous whatsoever at all because now I know what to expect.

And, you know, I do different scans at our clinics, like the DEXA scan, VO2 max, RMR, all that stuff. This one was a

bit different because I think the most, the reason why I was mostly nervous was the fact that I would going to be like in a confined space for X amount of minutes.

And I typically don't get too nervous with that because obviously being a retired fireman, firemen for 12 years, You have to learn how to being confined spaces, and breathing restricted.

So, but I wasn't a little bit nervous. Well, I just think, it's really interesting to me, and it goes back to this point of fear, health anxiety. I work in a space, but I still get health anxieties.

Well you know what, let me add to that, because I think I wasn't thinking of one part of your question. Yeah. Was a little nervous about going through the procedure.

What I was most nervous is getting the results. Right. That's the part that I'm nervous. And then once you get the result, It's almost like you went into a sense of meditation.

My results were good, with the exception of my back, which I already knew I had an issue there, dealing with some sciatica. Which even that gave me peace of mind, because now I know what it is.

Now I how to work on it, what I need to do, the type of treatments. I got an inversion table at the house, I'm working with a chiropractor, specific to the findings that we got from it.

Yeah, and of course even with those, well, yeah. Yeah, there's something kind of interesting. I have a young child and when my young has some problem, they don't feel well, have booboo or something.

They want to tell everyone. There'll stop someone on the street and say, look at this band-aid. And something happens between the age of one and the We're all, you know, when we arrive at 20, we don't want to talk to anyone about our health.

We don' want acknowledge health issues to ourselves. Right. You know? We, if we feel bad, We just keep convincing ourselves that it's going to go away tomorrow.

I think if, and I would argue 95% of us are this way. It doesn't matter whether it is a problem with our bodies or a little ache in our teeth or something.

And we just hope we will it away. Yeah. Um, and I, again, I think that's, when I say that, just to say it, it's anyone's fault. I don't think it is the system's.

It's the systems fault, yeah. And as soon as you acknowledge that then you get the power now. Now you can say, okay, how I feel as a product of the. System I understand that now I can choose how.

How do we change that? I think one early diagnosis at a time. Yeah, I mean, there has to be a movement, you know, and I keep the movements happening, especially with the most recent election, right?

Yeah. It's having R. F. K. Junior, being in place, where he's wanting more of that proactive preventative approach to people's health. Um, I do think that almost in the two, almost two decades of being in a functional medicine space, this is the first time that I actually see things really moving in any very positive direction for the industry.

Yeah. Well, if you look at sort of the interventions that make the most sense, prevention for sure is number one and it's chronically under invested in.

Right. Early diagnosis beyond that. So, you know, there was a study in the field of cancer that came out a couple of weeks ago where they looked at all of the last 30 years of Kansas stats.

And about 80% of reduction cancer deaths could be attributed to early diagnosis and about only 20% to better treatment. And yet we spend more than 80% of our resources on developing more cancer drugs.

And we spent very little on early diagnosis. So I think prevention and early diagnoses are absolutely the key to transforming the health system. I agree with that and and I think you know with the new administration potentially there's like in all parts of government there sort of like a willingness to challenge some of these sacred cows yeah and i think that's what you do as an entrepreneur when you come in and say hey I I want to build the future that I would like to have and think this the government hopefully is going to approach health care with a much more open mind than perhaps previously yeah Andrew you guys have pre-nouveau facilities in other parts that of the world besides the United States We have US and Canada, and then we're opening internationally this year as well.

Awesome. So the reason why I'm asking that is, you know, here in the United States, it's more of a, when you look at our medical system, its more reactive versus proactive, right?

We live in a sick care system versus well care. And you go to other countries, like in Europe, you go into other countries, a lot of Asia countries where the doctors actually get paid to keep you healthy versus here, they get to try to make you healthier, stabilize your symptoms rather, once you're already sick.

I'd be curious to see eventually when you are in a lotta these other country because it's just a matter of time of how people react to this type of business that you have.

Yeah, I mean, we only really have experience in the US and Canada, but I find it really interesting that, you know, people, that has become politicized, which of these systems is better, the U. S.

system or the socialized medicine system of Canada? I can tell you that they're more similar than they are different. I think both of them are reactive healthcare systems.

Yeah. And so it's just a quick, the only difference is who's paying for it. Exactly. You know, either your employer's pay, you're paying it indirectly through the goods and services you buy that are, like made by your employers or the government is paying and you pay through tax.

Right. That's a really minor difference, frankly, than anything substantive as to how healthcare is sort of delivered. You know, I think Asia probably does it differently.

I Think in the Middle East, there's a lot of openness to look at different models. But probably at this stage, it's not the health care system where you live that's important.

It's probably more just how you leave your life, you know whether you're in a blue zone, for example, and there is going to be a greater determinant of how long you can live.

Right. The system is one thing, but when you educate yourself to understand the things that you can do, you don't have to worry about the system. Like right now, we don't have to worry about the system to be able to go get a pre nouveau scan.

Right. If people understand it and accept and and are willing to actually go in there and pay for it, you can get this done now. Yeah. So talk about this then.

You guys have the ability to detect over 500 different conditions. I believe it is. Yeah, maybe let me explain how it works. So these machines are big MRIs and these MRI's are able to essentially take images of the inside of our body by listening to a little signal that's given off by hydrogen.

And so we take all these photos. And hydrogen happens to be in fat and in muscle and there are signals we can listen to for MRI in blood. We can measure hardness inside the body.

So we take all these pictures, all this filters for different tissue compositions, and we layer them all on top of each other. And we look at any one little three-dimensional pixel in your body and really understand what that is.

How Prenuvo Scans Work

Things like cancer have a certain signal to them. across these different photos that we take, as do many other medical conditions. And so in one sitting, in about 45 minutes, we're taking about 1.3 billion voxels, which is essentially three dimensional pixels inside your body.

Wow. We're able to diagnose cancer at stage one, aneurysms, and about 500 other conditions, the real number is much higher than 500, but there's just not a lot that you can't see with those machines.

Wow, that's amazing. What are some of the common conditions that you guys see frequently when people come in? Probably in the US, the most common is fatty liver.

We see that in about 20% of patients and the population prevalence is about 30%. So our patients are a little bit healthier than the average person in a population.

And when we find it, at least half the people don't know that they have it. And it's one of those surprising insights. So we'll have people that might be super fit, firefighters, or they might run triathlons, and they're exercising a lot and their carb loading.

And they don't realize that genetically that carbs are turning straight into fat inside the liver. Yeah, so that's when we see MSK degeneration in lots of folks.

Really, interestingly, we have started to see it a lot earlier than we expect. So the average spine of someone who is 20, 30, or 40. You said MSK muscle cell?

Yeah, so spinal degeneration. This is where we see disc bulges or we lose vertebral variety height in the spine. The 12 years of firefighting didn't do much good for that.

Well, you're a little bit older, right? So you sort of didn' grow up necessarily with iPhones and things like this in your hand 10 hours a day. What we're seeing now is the average spine of a 25-year-old looks like the every spine a 40-year- old.

At least the cervical spine. That's crazy. From being on their phones the whole time and sitting at desks and so on. And so now they're asymptomatic. They feel totally fine.

The question is how they can feel when they are 50 or 60. Oh, that's scary. And wouldn't it be great to know about it now so you can make some sort of course corrections.

Yeah. So we see a lot of that. We see lot inflammatory problems in the digestive system, so IBD, Crohn's, colitis, and these are often, I would say that typical person we find this in, we've seen in men and women, but it's the men that don't realize they have it.

Really? The men are like, Oh, I'm totally normal. Great bowel movements. Everything's fantastic. And then we'll find out, oh, you've got kind of like some pretty bad colitis to work on this.

Yeah. If you catch that early, and start doing things to decrease that inflammation, You can really make a huge change if you get it early. Yeah. So those are some of the big ones.

Um, there's obviously many more, um, we'll find, will find surprising anatomical differences. When we look inside people, find people that don't only have one kidney, for example.

Really? Yeah, and they never know about it. I mean, they're in their like forties and have no idea, only got one. They better look after it, Sometimes it's a congenital.

Oftentimes, if you had a blow to your abdomen when you're a teenager, sometimes the kidney just atrophies and dies and the other one grows a bit bigger to compensate.

Wow. Well, I found that I only have a stop at L4. I don't have an L5. Yeah. You know, supposedly I was born with missing a whole. And there are certain, depending on sort of the congenital variant of spine that people have, they can predispose them to certain types of spines problems.

So a lot of people, when they think about these scans, we might find something in life training. What I really think is most impactful is learning how the way you're living your life is impacting the physiology of your body.

Lifestyle is important. I mean, how you're sleeping every single day, what you've been exposed to, the type of physical work that you are doing, if it's your job, nutrition, or what are you drinking?

Are you drinkin' every night? What kind of effect that has on your liver, for instance? So this is a good way to open up your eyes. Allow the light bulb to turn on to make certain adjustments.

So I like that. The technology that you guys use for MRI, what kind of technology is that? Because I know you mentioned it's one of the… Yeah, so we have our own custom-built research-grade MRI machines that are built specifically for our use case, which is to screen the whole body a lot faster than you would elsewhere.

So the type of scan that we do, it's not unique. There were people doing it before we were doing. The thing was it was typically only available to people who had a cancer predisposition syndrome, usually kids.

And it took three hours and you had to have general anesthetic to do it. No one can, no matter how comfortable you are in confined spaces, three, four hours in this machine won't work very well.

So we needed equipment and software and AI that would enable us to capture diagnostic images in 45 minutes, about as much time as it takes to get through an episode on Netflix or listen to an album of music.

And we managed to achieve that two years ago. That's amazing. So you mentioned AI right now. So, you guys are utilizing a lot of artificial intelligence to enhance your technology?

Yeah. I would say at this stage, mainly it's in speeding up the image acquisition. Okay. So, uh, some pretty cool advanced AI that enables us to take, to under sample the signal that we listened to from your body.

And remember that hydrogen that's giving off a signal, that were listening for, we sort of under-sample it and we're able to use AI to like reconstruct that and to sort.

Amplify the single that. Oh, wow. And we use that extensively to speed up the scans. Beyond that, we're doing a lot of work on AI to help us in a couple areas.

One is to make the radiologist more efficient by identifying features inside the body that require a deeper look. And then secondly, to identify these little tiny changes in the body that are a little bit hard or tedious for the radiologist to pick up.

So this might be looking at every vertebrae in your spine and say, okay, the curve angle here changed by one degree or two degrees from your last scan a year ago to now.

What's going on? Because right now it's not a problem, but if this trajectory continues, you're going to have a problems in 10 years. Right, right. Or looking at the fat in your liver and say, okay, Right now you got like 3.72% liver fat.

That's pretty good. But it was only 2.3% last year. So what happened? Right. You know, because you are still normal. It's a good score, but the trajectory is problematic.

So it's in a similar way other companies are looking at blood testing. And it used to be you had normal cholesterol and abnormal cholesterol. Now what's interesting is how's your cholesterol changing in response to changes you're making in your lifestyle?

And why don't we try and manage your chelesterol so that you never arrive at that abnormal sort of reading? I agree. And one of the things you just mentioned right now is like, you know, understanding what that baseline is.

In my opinion, this is why it's so important to start getting these scans early on so you can kind of understand what your normal is, right?

Common Findings and Baselines

So then as the years go by and you get additional scans, Even if something's a little elevated, but we start noticing year after year, it stays exactly where it's at.

Well, then that's probably has become your normal, and it is not a problem that needs to be addressed. But you don't know that unless you get this baseline early on.

Well, I mean, it's great to compare you against you, but we also have now scanned over 100,000 patients. So we are also able to kind of build like a normative curve of what we expect to see for any given organ based on the age of the person that we're imaging.

Okay. Wow. Let's say I could look at your brain. And after I normalize it for your skull size, I can plot it on this curve and say, okay, your brain volume is comparable to someone in their thirties.

And if you're 40, that's great. You know, if your 20, That's not so good. Um, and start to understand how the trajectory of your brand volume changes as you age.

Right. In the average, we know what that is because we've scanned so many people. It's about your, brain shrinks about 3% every decade. That amazing. Now, how's your brain changing?

Is it shrinking more than 3% or less than three percent? Are there changes in brain volume in certain areas that we are really worried about for things like Alzheimer's, like the hippocampal region?

So once you start measuring these things and you have these normative data sets, you can start actually giving people a pretty good idea about what parts of their body they need to focus on.

And what you need a focus are going to be different to what I need focus because we're individuals. We have different genetics and we live different lives.

So all of these people that you've scanned, I would only assume that, you guys are running studies on all this data, right? For a couple of reasons. One is, there's a lot of biomarkers here to be uncovered that can further our understanding of human health.

Of course. And then secondly, and I'll give you an example of that. So even in the brain, we talk about brain volume. If I just took one single scan, You know, and you had a lot of significant brain volume loss that I could see on that scan.

Pretty much everyone around you already knows that you have cognitive decline or dementia. If I take two scans, now I can start to understand what the trajectory of your brain volume looks like.

With AI, we can stop looking at the thickness of the folds on the outside of their brain. And what we notice is they start become more flat before you lose brain volumes.

Now, why do they become flat? The hypothesis is it's because of poor blood circulation, poor flow. So now we have a sequence where we look at perfusion inside the brain, understand how is the blood getting to the extremities of brain?

And so these, this combination of hardware that can run these really powerful sequences and AI that could analyze

it gives us more and more early indicators.

And that inevitably begins with a clinical study and a publication. Right. Um, and the second area is really how do we, you know, we're trying to understand the efficacy of these exams.

Uh, how can we collect enough evidence so that rather than these being something that's available outside the healthcare system, we can start to speak to insurers about having these covered for more and more people in the US.

That would be amazing. Have you guys published any of these studies as of yet? We've published I think now 20 or 30 abstracts or papers and presented at a number of different conferences.

There was one last year that was the most read paper in The Journal of Aging and Disease that established a connection between visceral fat levels, is fat inside the body, and risk of dementia.

So we are furthering the science bit by bit. Now some of those big efficacy studies take a lot longer to conduct. I can only imagine. Where can people find some those studies?

If they go to our website, I believe it's pranuva.com slash research. Whenever we publish something, we put it there. Andrew, let's talk about the different body parts and organs that get scanned throughout the process.

Because one of the things, and eventually we're going to talk my experience. Earlier you were talking about when you first got into the technology space, the iPhone and whatnot.

And I've always said that iPhone is very user friendly. What you guys developed is a very use friendly platform that's end consumer facing. And part of it, like when I go online to look at all my results, it has all of the different systems and body parts and organs and stuff that go through the scan.

So I want to talk a little bit about all the of different organs that are being scanned and the systems in the body. Yeah, well, look, the starting point is to say the body is a system.

So we should look at it all in one go. And that's very different to the traditional medical system, which thinks of us as sort of a bag, a collection of organs.

We can learn a lot about, for example, your cardiovascular system by looking at your brain, you legs and your lungs, not even looking your heart. For us, it's really important to take all these images in 1 go, It's also really economical because your liver is right next to your pancreas.

So for imaging your lever, we're also seeing your Pancreas. Right. I mean, it's a great time saving versus going and getting five, six different scans is to do one scan and collect everything.

Now with the heart, you were talking about you can scan the brain, the legs. What is it that when you're scanning that you could tell the health? Well, what we are interested in with the heart is, you know, a few things like how good is it at pumping the blood around the body?

Okay. And if we see fluid buildup in the lower extremities or the lungs, we know that there's a problem with a heart as a pump. Of course. If we're worried about cardiovascular disease, one of the indicators, and it's not the only one, is that we start seeing what's called small vessel ischemia.

So we started seeing little blockages in the brain. Why? Because the brains has these little tiny capillaries. And when they become clogged, a little bit of brain tissue dies.

That shows up as a white spot in your brain And if you have a couple of these, no problems. It could just be from physical exercise or you bumped your head or something.

But if we see sort of a constellation of this, then we're concerned about arthrosclerotic disease or cardiovascular disease. Interesting. So even though we can't really image the heart directly.

If someone has a family history of heart disease, or they're symptomatic, they should go and get a dedicated heart CT. Right. we can still tell a lot about it just by looking at these other organs.

Of course, of course. That's very interesting. My partner in Liquivita, who's the chief medical officer of our company, he's an interventional cardiologist, which he believes highly of what you guys are doing.

With the heart, one of the things that he does, you mentioned the CT, He does the CLEARLY exam. Correct. He utilizes the whole AI mapping and everything.

Now it's CT uses radiation. So I mean, I've done a calcium score. If I had a family history, probably do it clearly. I don't think people are typically doing those every year.

Right. Um, but absolutely. You know, when I hit my mid forties, went and got a Calcium score just to check and see that like my genetics don' predispose me to calcification in the heart.

Absolutely. So going back to all of the body systems, you're scanning the brain, right? You're going into the nervous system, which is like the first category which goes from the the spine, correct?

Well, we sort of see everything. So there's a few videos on YouTube, if they search for it, where we've actually gone through an entire scan. And we do these webinars every couple of months where I have a radiologist literally go through a reading.

The whole reading? So they'll go to a patient from head to ankles And here's what we can see in the brain and this brain looks great. And he's this problem here.

So the goal here is no smoke and mirrors.

AI, Research, and Body Systems

We want to show you exactly what can we see, what these scans are good for and what they aren't and how they should fit into the other tests that you might want do.

But if it's inside the body and we get a signal on it, we could tell something about it with these machines. I love that. So, you know, we're talking about prevention.

And earlier, backstage you were telling me about what you're doing for first responders, which, obviously I have a soft spot in my heart for that because I was a first responder for 12 years.

What you guys have is what they need. And it's not just the firefighters and paramedics. It's other people that work in certain lines of work that they're getting exposed to high stress, they get exposed chemicals, and all other kinds of things that can cause disease to develop.

So I want to talk about this Fresh Responders stuff, man, because, you know, this is something that I wanna really get out there for a lot of these other firefighters that tune into the podcast to really take this in consideration and bring it to your chief, right?

Bring it your to chief. Bring to the union because ultimately this what you guys need to prevent having a deadly cancer or some kind of disease from developing.

Yeah, so I think we worked, the first fire brigade we work with was the Boca Raton fire department, and now we've worked with a ton of them around the US.

We are, I mean, we're seeing rates of cancer probably four or five times greater than we are in other populations of folks. So it's like, I mean, it's really touching because we're saving lives.

More than 90% of what we find is stage one, localized cancer, asymptomatic. So they didn't know that they had it. And as a result, two things sort of happened from those early experiments.

One is, other fire departments out there have then gone to their local cities and got funding to have screening done for their entire teams. And then secondly, we launched towards the end of last year, a program for first responders where we offer discounts specifically tailored towards first-responders.

And I think, I mean, these guys do a lot for the community. I live in Los Angeles normally. You know, and, before then I lived in San Francisco when there were big fires up there in Napa Valley.

I mean, I was just living in the city and it was smoky for like two or three months. And I wasn't out there fighting fires for months on end. and I just can't imagine what was being breathed in.

Obviously we all know that this causes long-term health concerns. Um, And, um, we need to do more to look after these folks. And I mean, listen, you remember all the first responders that were out in September 11th, the illnesses and the cancers that developed from those people that we're on ground zero.

I was horrible from what it was. So if we could catch it early, that's extremely important for us to do. With the firefighters, what is that discount that you guys typically do if somebody just were to come in?

Do you know? I believe it is $500 off or a decent amount off. I mean, it's the best we can do as a startup business, but obviously the path would be for these to be covered by employers.

We think of firefighters as almost like an enterprise, a company. It's healthcare that's paid for by your employer, and this is an employer for which their employees are subjected to a high occupational hazard that affects their rate of cancer and other disease.

they're not the only group of folks out there. And what's kind of cool about some of our outreach has been, it feels like all of the wellness and longevity benefits of previous generation, sort of, the companies that invest in those were like the Silicon Valley, you know, Facebooks and Googles, and they all got to enjoy their chef-sponsored kitchens and all the sorts of perks of working at those companies.

The sort companies are interested in what we do are otherwise neglected. First responders, metal and mining companies, forestry companies agricultural companies drywall companies that want to do something for their employees.

So it's pretty cool that where we're getting traction are actually businesses and sectors that really need this. And I'd say, before I retired from the fire department, there has been more focus on health and wellness, mental health as well too.

And before, I left, one of the things that they were doing, it's a test, a whole scan, they call it the life scan. But I was already involved in my industry, knowing what good scans are.

And, you know, it's better than nothing, but the life scan that they're doing right now, It's really, nothing special. You know? It is not going to catch what PreNuvo is going catch in these individuals.

So this is definitely something important and I really do appreciate that you guys are offering this. Yeah. We were talking before the thing. I mean, what people don't realize even is this equipment that You guys were wearing for many years is also carcinogenic.

Yeah. And so, you know, it's, um, It's a real, real problem. I think it is a problem that sort of needs a greater focus. Yeah, the whole turnout gear.

Um, I mean, there's huge class action lawsuits happening right now where you have the forever chemicals and you got to think you're going into a fire.

There's no breathing barrier, so you're sweating profusely, where all of this chemicals in this heated environment is leaching directly through your pores into your bloodstream.

The foam that we use to put fires out, right, that causes a disruption in the thermal layer, to, put the fire out. Um, that also came about that has all these different forever chemicals that are causing cancer.

So, you know, I mean, these guys are just getting exposed to a lot of bad stuff. I'm mean you got police officers that go to the shooting range, on a weekly basis that inhaling this lead.

You know what is that lead doing to their body? And then the other group I think is worth mentioning are veterans. There are 2 or 3 million that were exposed these toxic burn pits.

And he got funded. I mean, there's been, you know, legislative action and there was funding allocated to the health concerns of this population of veterans.

And do you think they do any imaging? No. So, I don't know what programs they're spending that on, but I would have thought imaging would be pretty high priority.

Yeah. Andrew, obviously we went through the whole process. I want to talk about my experience. Let's do it. Sometimes when you do something that's clinical, you think you're going to be going through this clinical process, almost like you go into a hospital.

First Responders and High-Risk Groups

That wasn't it, And, you know, when I started Liquivita, one of my main focuses was, how do we make this where you don't feel like you're inside of an urgent care, like a hospital where people are like dying and screaming and just like feel horrible?

And going to Pranuvo, it's a cycle, almost like I was at the Ritz Carlton. No lie, man. You go in, it's very trendy, beautiful atmosphere, you guys have refreshments at the end to be able to have something to drink healthy stuff to.

Your own changing room, because you change into the scrubs that you have to put on. in the experience itself of actually going into the MRI. I mean, I'm not a movie person, and I don't watch that many movies, but I was able to watch a whole movie.

So it was pretty cool going through this and watching that. But it so comfortable. At no point in time did I feel anxious or anything. Like I actually got to a point where I forgot I even was in an MRI machine.

And I typically fall asleep during movies, which I fell asleep, and then the technician started, because you got these headphones on, says, hey, you gotta wake up, he says you've gotta hold your breath.

And that was pretty cool, cause you're in constant communication with someone. So it's not like you are by yourself, they can hear you, can you hear them, if you have a movie, it basically zones you out because it feels like your at the movie theater, so you really can't even see the equipment or anything.

So the experience was fantastic. So did you come up with the experienced process? Okay. It's um, and by the way, to be clear, I don't, um I'm not a very fancy person.

You know, like I didn't want to, the intent here was not to build the Ritz Carlton. The only, that the reason we did it was because of this insight that we had, which is again, the reactive healthcare system is so triggering of our anxieties.

We didn't want to create an environment that felt like the rest of healthcare. Not because we want it to be fancier, but because you didn' want trigger that anxiety.

And what we found was when we set up our clinics this way, the rate of claustrophobia or cancellations went way down just because it was a different environment.

And not just the physical environment, but the staff are really well trained to hold your hand through the process and be patient. Yeah, they were great.

Unlike the insurance world, which the customer is the Insurance company, for us, you are the customers. So if you don't have a great experience, then you won't tell people about it.

And when you're trying to build a new category of product, it's really expensive to acquire customers inorganically. You have to do it through word of mouth.

Yeah, and that experience is just so important. It made me want to come back, and that's important. When you have that feeling where you say, you know what, this was pretty cool.

And one of the things that we talk a lot about in the functional medicine space is, let's make health and wellness hip and cool, it doesn't have to be this whole stuffy environment where, ya know, the doctor with the white lab coat and the stethoscope over their neck, like, lets make being healthy cool and you guys are doing it.

Our experience probably would be the same as yours, right? I mean, when I think about IV drips, I actually think, you know, the chemotherapy room, which I cannot imagine a more depressing place probably to be in.

So imagine like there's a spare seat there and you're like, oh, these guys know how to do IVs. Let me send my consumer to where people get in the chemo to get their IV infusion.

it doesn't work, right? You can't do what you do in the existing healthcare system. And I think what we've found since we launched was there are other folks out there that say, well, I've got MRI machines.

I have imaging clinics. It could start doing this as well. They've just been universally pretty disappointing in their traction because you can operate this type of business in a traditional healthcare setting.

Yeah, it's not the same. So Andrew, what is the next big thing with PNUVO? Well, I think we're sort of really investing a lot in two areas. The first is we still only just got started in bringing this to more and more people.

So we have another 10 locations we are opening this year in the US. We're opening in London, our first location in Europe. I'm from Australia. Going to open our location, in a town in which I grew up, Melbourne, Australia That's awesome.

And you know, we built a very detailed economic case, but I can tell you really behind it was I just wanted to have a location my parents could get scanned in.

I love that. So the goal is by the end of next year, early 26, there'll be a occasion within sort of an easy drives distance for most people in the US.

Patient Experience and Future Growth

How many locations right now we're in 20 right? Now at least in the markets in which we can legally operate there are some states in The US where you cannot set up a private MRI business without a license and getting a License requires a whole bunch of litigation.

Oh boy with the entrenched players in those markets Wow Um, and the second area I'm really excited to invest a lot in is just taking this really wonderful technology, MRI technology where.

I mean, there are all these like conferences that all of these MRI physicists, nerds go to, and they're developing these incredible sequences to screen for different types of disease or do things faster or more accurately or listing for signal other than hydrogen, like listing sodium to learn more about what's going on inside the brain or potassium.

And it's just the innovation is incredible. Wow. I think what is lacking oftentimes has been figuring out a way to bring some of that innovation to consumers.

Well, we're growing fast. We are connected to consumers. And so we are looking to introduce new, deeper sort of sequences to understand more and more about your neuro health, your cardiac health.

Right. Your joint health And so you'll see us sort of launching a bunch of products this year as well. That's awesome. To sort extend out what we did.

So you got your baseline. Next time you come in, maybe we do a deep dive on some of those other systems. Yeah. Man, I'm excited to watch the journey of Praneuvo further developing into greater and better.

So, that's amazing. So Andrew, as we wrap up here, for the listeners that are tuning in, you know, the doctors, which we have a lot of doctors that tune in or any of the consumers, if there's one thing that you can leave them with, this is somebody who can really relate to what you're talking about that wants to take things to the next step, right?

There's a one you leave with. What is it? Uh, you know, to quote the words of that iconic shoe company, just do it. I mean, I, if I had a dollar for everyone that I met who said, Oh, pretty much great company.

It's on my list to do one of those things. And I'm like, well. I know you got the money to do it. Why don't you do? And I think the challenge with preventive health is we can always put up for another day and do something that our future selves are gonna thank us for, which is like, get on top of this.

Hopefully that means getting a prenatal scan. Maybe that mean getting blood tests. That means checking out the parts of the body, but just get started.

that's the most important thing. Andrew, it was a pleasure to have you on the podcast, man.

Final Advice and Closing

This is very informative information, and we can't wait to see how things even further develop. Awesome. It's great being here, Sav. Cheers. Guys, this was another episode of a Healthy Point of View podcast.

Now check this out. Pranuvo was kind enough for all the listeners to be able to get a discount, right? What you're going to use is a promo code for $300 off of your Pranuvo scan and it's healthy POV right easy to remember Healthy POv PO V for point of view podcast, so make sure you use that promo-code healthy pov Inquire for more information, you're gonna have all of the information where you can follow Andrew on his social media, PreNuvo as well, it's all gonna be down below, so make sure you subscribe, click share with all your friends, and thank you for watching another episode.

See you on the next one.