Getting and Keeping Your Energy Edge Transcript

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Introduction to Laura Front Harrow

Welcome to this episode of the Reverse Alzheimer's Summit. I'm so delighted to introduce you to my friend Laura Front Harrow today. She has served thousands of patients working as a nurse practitioner over the last 22 years.

Her work in the health industry marries both traditional and functional medicine. Laura has wellness programs, help her high performing clients boost their energy, renew their mental focus, feel great in their bodies, and be productive again.

Her belief is that to create optimal wellness, first we need to identify and clear the root causes of our health problems, usually toxins, chronic infections, and then eliminate inflammation, restore gut health and mitochondrial health.

You can see why I have invited her here today. Her and I overlap in the way that we approach disease in terms of root cause medicine. And I know that she has so many great insights to share with us.

Laura, welcome. Thank you so much, Heather. It's wonderful to be here. I'm so glad to participate and support this audience. This is such an important topic.

So you started and still work in at Kaiser when the largest HMO is in America and you have been shifting, kind of like your passion and interests have been shifting over the past few years.

So tell us about this transition and sort of why your your changing focus. Yeah. So I grew up and in Kaiser, right? I had my first job as a nurse practitioner there in 2001.

That's when I started. We're now in 2022. You know, so and prior to that, I was a registered nurse working in hospitals. But, about, you know, about 17 to 18 years into my career, I realized that there was something that was missing in the Western medicine model that people weren't getting better.

My eyes were opened to the possibility with functional medicine. And it's interesting because I worked in a preventive medicine department and they do amazing work.

They do. And the difference between Western medicine prevention and functional medicine prevention is huge because in the in the Western medicine world, it's not really prevention.

They're looking for early detection. And and that's a difference. It's not. So you go in and you get, you know, your colon cancer screening, your prostate cancer screening, your breast cancer screening, your cervical cancer screening.

Functional Medicine vs. Western Prevention

You get your labs run. And what are they looking for? Early disease. We're looking for colon cancer early so we can treat it. We're looking for you know, we're feeling your thyroid thyroid and we're palpating for a nodule so we can find it early and do something about it.

We're doing a mammogram so we can find early cancer and do something about it. So this is really a different kind of perspective with functional medicine where we're going really upstream and we're trying to find the source that can cause problems like cancer, Alzheimer's, chronic heart disease.

And we're trying to eliminate that. So instead of looking for early detection, we're just looking at real prevention. And that's a huge difference. Wouldn't you agree, Heather? Absolutely. Yeah.

It's just a totally different definition, a totally different concept. And I think when people say prevention, we think we're saying the same things. But then to really define like know what we mean by prevention is not actually having a disease at all, not going down that path.

And so you talk a lot about cell health and in particular mitochondrial health. Right. These are the powerhouses of our cells. They generate energy. And our brains use so much of the energy.

Right. We it's 3% of our weight, but 20% of the oxygen use, 30% of the energy use in our body, and especially when we're asking it to do some work, some heavy lifting, cognitive.

And so I think this is a theme across the reverse Alzheimer's Summit. But tell us about like the cell health and cell function and how you support mitochondria for your opinion. Yeah.

So so mitochondria are like your life force right. So you think of mitochondria like your life force. You know, you can think of how tiny a cell is like.

We can wrap our mind around that. Now think that in a, in a, in a particular cell, in a really important organ in your body, like your heart or your brain, you'll have 10,000 or more mitochondria inside that cell, along with the cell nucleus and everything else that's happening inside the cell.

And that's just mind blowing, right? How can all that fit in there? And how can those little teeny tiny things be so important? So I really like to simplify things and make it really easy to understand for people.

So when I think about we know that the mitochondria are your powerhouse of your cell. We hear that all the time. We learned that in biology class they produce something called ATP, which is energy via the electron transport chain.

And I really like to break it down to two types of energy. You have physical energy and you have invisible energy. So physical energy is the energy you feel throughout your day.

Do I get a slump midday or I have enough energy to get through my day? That's kind of like your, your skeletal and your, muscle energy. Right? You feel this fatigue?

You can feel it in your brain kind of when you're feeling tired and sluggish. But then there's also this invisible energy and invisible energy. It's all the energy that you need to do all the things that you don't know is going on in your body.

So your body at any given time is digesting food. It's making hormones. It's making neurotransmitters for your brain. It's putting together vitamins. And it's, you know, restoring tissues.

It's removing toxins from where they're not supposed to be. That's invisible energy. And you need energy for that too. So I'd like to just break down how mitochondria work and what they are, because there's kind of like this crazy concept of all these little organelles that live inside of the cells.

So let's talk about I like to compare them to a house plant other. So I know we'll keep it really light. So mitochondria are a lot like house plants. And what we're going to talk about is location and living conditions and function of mitochondria.

So in terms of location location is everything right. So we know that some cells in certain organs of your body, like your brain or your heart, they have a really vital job.

And if those cells are not healthy or if you don't have a lot of mitochondria in those cells, they're not going to function well.

Mitochondria, Energy, and the Houseplant Analogy

So in terms of where mitochondria live, they live inside individual cells like we just talked about, which are located inside the organs. So your brain liver, kidney, heart which are located inside of your body.

So you see we're going from small to bigger. Now similarly house plants, they live on a windowsill or they're sitting on a shelf in a room or they're hanging, you know, you know, in a little potted plant and that is inside of a room in your house.

So they're in your kitchen or they're in your bedroom, or they're in your bathroom, or they're on the patio, and that's inside of the bigger structure of your house.

So just to kind of give you an idea of how they're similar where they live, and then you think about living conditions. So given the right conditions, mitochondria will thrive and grow.

They'll reproduce and so will house plants if you give them the right conditions. And they're also fragile. Mitochondria are fragile. If you withhold what they need, they're going to die or they're going to malfunction.

And house plants are the same. They're going to die or they're going to limp along. And mitochondria and house plants need almost the same things. They need clean water, they need sunlight, and they need nutrition.

So I know it's crazy, right? So now everybody really understands about mitochondria. And here's something else. Even funny studies show that if you talk negative to your house plants, they are more likely to have stunted growth.

And the same for your mitochondria. If you are in a stressful, you know, negative environment, you're going to yield lower mitochondrial function and lower mitochondrial production in your body.

So a lot the same in terms of function. House houseplants create life giving oxygen and they help remove toxins from the air. And mitochondria create life giving ATP energy that's needed for every cellular function in your body.

That physical and invisible energy we talked about. Plus, they assist in the detox pathways to keep your body flushed of toxins. So there you go. Houseplants and mitochondria I love it.

I think that's so. That's great. I was talking to our friend Chris Shade this morning and it's a lot of interest too. And so two ends. And you know, it's such phenomenal information and really, really helpful.

But like I've got to turn my brain on to keep up with him. And I, I spent four years in medical school. So I know that this is when we can relate these things to tangible.

That's how science, things that we're very familiar with. I think it's it's helpful because then when we go to water ourselves, nourish ourselves, get that sunlight, we can we can think back to that houseplant and your analogy and I just think it's so, so helpful.

You want real quick before we go on to the next thing, I just wanna say there's three main functions that mitochondria do. I mean they do lots and lots and lots of stuff.

But I think it's really important to talk about those main functions. Now that we kind of established how they're similar to house plants, but what the heck are they really doing.

Right. Because we all know they create energy. So would it be okay if I talk about those three functions really quick and share it? Okay. So first thing what we're gonna talk about cellular respiration energy production and cell danger response.

Right. So those are really important concepts. Now cellular respiration. So if you think about how your lungs work right. So when you breathe oxygen goes into your lungs.

And then it's move throughout your body by your bloodstream to your cells. And then it gets into the cells where

mitochondria use the oxygen oxygen. And then carbon dioxide is released from the cells and moved back through your bloodstream to your lungs. And exhale.

So your cells have their own biochemical process that occur called cellular respiration, kind of similar to respiration in your lungs. Something's coming in oxygen.

Something else is coming out CO2 and just byproducts of metabolism and everything. It's it's moving throughout the body. So that's a big function of mitochondria.

And then the second thing is this energy ATP production. So you've heard a lot of a lot about this from Chris Schade from other people on your summit.

And I just want to break this down really simply for you. So I want you to think of ATP like currency. So you have a bank account with money in it. So ATP is the currency or the money of your body.

And when you are at the vending machine and you want to get a candy bar out of it, you have to put in a currency to get it out. Well, ATP is like the same thing.

When you're ready to make a neurotransmitter, there's a currency exchange that needs to happen for that neurotransmitter to be made. So let's say that costs two ATP.

But let's say getting up and walking across the room costs you 20 ATP. Now I'm just making up these numbers. I'm sure somebody somewhere knows the numbers.

Somebody smart on your summit knows the numbers. But so it's this currency exchange and that ATP is really vital. And the mitochondria make that currency for us so that we can do everything the physical, energetic things and the invisible energetic things.

And then there's this whole cell danger response. And this is really important. And this has come up in research, you know, in recent years that mitochondria have this really critical role in defending the body against threats.

And this is going to blow your mind. So they can detect mitochondria, can detect the presence of things like infections inflammation immune over activation and the presence of toxins.

So I'm sure there's a lot of people right now watching this who had Covid at some point in the last couple of years. So one of the hallmark signs of Covid is you have a severe fatigue.

Well, this is part of the mitochondrial response, the cell danger response, because the virus, any virus coming into your body also requires ATP. It wants your energy.

And so what are the mitochondria do they shut down ATP production to starve the virus or whatever thing infection you're fighting? And at the same time, your physical energy and your invisible energy goes down as well, and you just feel wiped out.

Now, that's an acute cell danger response. It's kind of like how we have a fever to help and to help burn out bacteria or viruses. You want to let that fever go until it gets to a point where it's too dangerous or uncomfortable, and then we give you something to bring it down.

But I know when I'm sick, I let it rip. Like, let that fever fly because I want it to kill off pathogens in my body. Well, that ATP reduction, that that fatigue is one of those responses.

The problem is when you're in chronic inflammation and chronic attack by infections and chronic, you know, distress, and you have the cell change your response going all the time.

That's not good, but acute. It's really good. So I just wanted to talk about that for a second because I think that's

really important to understand with the but it's not just about producing energy.

Those mitochondria do a couple of things. So okay I side barred. But go ahead extremely important. And I think that that that gives us a really good sense of, you know, what's the connection between mitochondrial health and dementia and even like Covid.

You mentioned another one of the hallmarks is this brain fog that people are stuck with after having Covid, particularly those who are susceptible to long haul Covid and the the mitochondria.

I think we can all relate to this. Being sick and just feeling like you have no energy for anything and that that's what you're describing. That like downregulation of energy production in an effort to protect us.

Mitochondrial Damage, Inflammation, and Disease

Well, when this happens, like you said, that there's like this switch that flips where it's not the acute response anymore, but now a chronic condition of cell danger response.

Now we're stuck in this self-perpetuating cycle of inflammation, of lack of energy, and now our brains don't work right. And we wonder why. So what do we do about it?

How do we restore mitochondrial function? Well, you really have to. First you have to think about the link between mitochondria health and chronic health problems before you get to restoring.

Right. So there's this cascade of steps that occur with mitochondrial damage. So first we damage them right. So we can't I mean we we're going to talk about how to repair them.

But first we kind of need to talk about what did we do to mess them up in the first place. Right. So some things we have control over and some things we don't.

So you don't have control over your genetics. You don't have control over aging. Every year you're a year older. And that's just you know how it is. But you do have control over some things like how active you are.

So for example, a sedentary lifestyle is detrimental to our mitochondria, chronic inflammation when a lot of things cause chronic inflammation, which I'm sure you've had tons of speakers talking about it.

But gut, dysbiosis is one of the ways we get chronic inflammation. And that's, you know, my happy place is is working with people on their gut health because it's so central to everything.

We can't heal you unless we fix that piece. And I know that's a central piece in your programs as well. And then if you have chronic hyperglycemia, high blood sugar levels and that, you know, is affected by so many things, it's affected by what we eat.

It's affected by your stress levels and cortisol levels. If you have a poor diet that's just full of sugar and processed food and, non-organic food containing pesticides.

And if you have nutrient deficiencies, if you're not getting enough food of healthy food, and of course, chronic stress. And I'm sure a lot of people watching this right now, have chronic stress.

They're either caring for loved ones who are who are sick with Alzheimer's, or maybe you're seeing you're in the beginning stages of of dementia, and you have this stress and you're worried about this progressing.

We've seen it happen to loved ones. So chronic stress is is a piece of that. It's a toxin right. Stress is a toxin. And sleep deprivation is another one.

I know you've had lots of people talking on here about the importance of sleep. And then, you know, one of my

favorite things that, I mean, it's funny to say, it's my favorite thing.

It's what I love to help people with is infections. So chronic bacterial infections that are common in the gut and the urinary tract, fungal, Candida infections, parasite infections, chronic viral infections.

When we think of virus, you know, we think of chronic Epstein-Barr, hepatitis, herpes virus, all of these things can, down regulate the immune system and cause inflammation and cause mitochondria decline.

And then environmental toxins, things like you're cleaning products, body products, beauty products using toxic candles and air fresheners, the off gassing of your furniture and your carpet and your wall, the paint on the walls in the car that you drive, I mean, and the toxins that are just out there from industry and, manufacturing that are getting into our water source and our soil and our air radiation, radioactive elements that are in our water like uranium and radon.

And then there's Emfs and all the 5G and the routers in our house. And, the nonstop assault of emfs, heavy metals, industrial toxins, mold and mycotoxins.

You can see the list of the ways that we screw up our mitochondria is enormous. And then once you start to have that attack of all these things coming at your body, it leads to metabolic instability.

So what happens is energy production, ATP, ATP, bank account is decreasing. You're running out of current of that currency. You have this increased metabolic waste.

Your cells are releasing damaging free radicals and waste that needs to be carried away by your detox pathways. You get an increase in oxidative stress in the body.

This hurts your brain. You get a lowered, antioxidant production which are protective to your brain. So so you're making less of them. And the next phase in the cascade is this dysfunction or metabolic inflexibility.

So you now have dysfunctional energy production. You have poor, fatty acid metabolism. This metabolic inflexibility is a really important concept. This is the ability of your body to respond to your metabolic demand and choose the best fuel, ketones over glucose.

So we want to be fat burners. We don't want to be sugar burners and ketones. They burn cleaner. They have less waste. When we burn them, we make better energy.

But most Americans are glucose burners because we have such high carb diets. And I'm sure, keto diet is part of what you use in your programs as well.

And the increased oxidative stress just goes crazy. And finally, this leads to chronic disease. So now you have Alzheimer's, now you have Parkinson's, now you have heart disease.

Now you have cancer. You have metabolic syndrome problems. You have Lou Gehrig's disease, muscular dystrophy, epilepsy, autoimmune disorders, autism, fibromyalgia, chronic fatigue syndrome, migraine headaches.

I mean, it just goes on and on, right? Heather. Right. Right. Now, you know, this can feel a bit overwhelming and anything for people, they need guides like you, to help.

But where do we get started? Yeah. So how do we fix this? What do we do to restore the mitochondria? So nutrition, nutrition, nutrition. Right. So we start here.

And this is simple things like eliminating refined sugar and processed grains and bad you know, rancid fats like your seed oils, canola and safflower and sunflower oil, rancid fats.

Eliminating casein and eliminating gluten and artificial ingredients and eating lots of greens and vegetables and

herbs and fruits and nuts and seeds and wood, goons and whole grains.

And, you know, the really good, healthy foods and healthy fats like avocados and olives and coconut oil and grass fed butter and ghee and, pasture raised eggs, for example, and clean proteins.

So grass fed, wild caught, free range, all those words are really important when you're buying your meat and organ. Meat is also really healthy for your mitochondria.

So liver, kidneys, heart, tongue, brain I mean it's crazy, but if that grosses you out, you can take them in a capsule. You know, you don't have to eat the, the organ meat.

I, I would never eat it. When I was a kid. My mom grew up eating liver and she loved it. And she would make liver and onions and I just couldn't do it.

I'm more of a capsule girl, so. Hey, Sam, but you're not the first person to mention this on, the summit. That liver is so dense and nutrients, but we got to, like you said, make sure it's grass fed or organic, because the liver is a place where we we can concentrate those toxins.

So we don't want to be eating that animal's concentrated toxins, but getting organs. Good. Concentrate and nutrient. So you have to get good liver. And then when it comes to eating on the whole.

So we talked about clean eating basically. And then there's some things you can do with your eating that'll really help. Like intermittent and extended fasting which helps the damaged mitochondria be purged through something called autophagy.

It allows the process of the mitochondria to remove damaged debris, to remove accumulated reactive oxygen and nitrogen species. And, and then there's keto, this high fat, low carb plan that uses ketones instead of glucose for energy.

So you become an efficient, energy producer energy maker. Your power plant works better, basically. And, and, you know, as an Alzheimer's, specialist, how important this is.

Do you have your, your clients do intermittent fasting or keto? Do you? Yeah. Yeah. If if we talk to people who have never been in ketosis, then absolutely, 100%, we want everyone to try it.

It's not always for everyone and we don't want to be in ketosis forever. It's just as bad as being in glycolysis forever. But what we want is that dynamic flexibility that that resilience and the system.

Like you talked about metabolic flexibility to be able to go back and forth from ketosis to glycolysis, using those fuels for energy really efficiently and the way our ancestors did, the way that we're designed to use fuel.

Yes, absolutely. And yet not forever. That's really important to say, but a period of time of of ketosis is going to help clean things up, right. You're going to become more efficient, and then you'll be able to incorporate carbs back in and get out of that ketosis.

So that kind of covers food and eating and the way that you eat. And then of course, regular exercise studies show that, that you get a 50 to 80% increase in mitochondrial capacity in people who exercise with interval training.

And I mean, you don't have to be an athlete to get this kind of interval and exercise, but it really helps with, mitochondria repair. It helps with balancing the mitochondrial cells production of new mitochondria.

And there's a difference between movement and exercise. I want to say that I mean movement is low intensity. And exercise is higher intensity with the goal to build strength and muscle endurance and burn fat and stuff.

So I always, you know, I, I work with a lot of geriatrics in, in my Kaiser clinic. And a lot of times when I'm talking, I

work in a bone osteoporosis clinic, and when I'm talking to people about exercise, like, yeah, you know, I'm I'm busy.

I keep myself active. I don't sit around like, but do you really go out there and, you know, lift heavy things and, and get your heart rate up.

How to Restore Mitochondrial Health

Right. Walking is not enough. No. I mean, who has seen an overweight letter carrier, right, right, right. Yeah. They walk. How many miles a day and people have these little dogs.

Oh, yeah. I have to get up and walk the dog every day. And so we're out. But it's a lot of, like, standing and waiting for the dog to pee, not getting like, a real exercise, which is but what you're describing.

Exactly. So that's really important. And people don't like to hear that, you know, they want credit for going out and watching the dog pee. Right? But if we want a reverse dementia, yes we are, we are on it.

So then the next thing would be stress reduction. So chronic stress increases inflammation. It, it, it, you know, reduces our immune system function. It increases fatigue.

So lots of strategies for stress reduction. I know you probably have people on here talking about stress reduction for sure. So the next thing would be get good sleep.

Anything less than seven hours of sleep per night decreases your mitochondria, functioning and decreases, the, the mitochondria DNA and you just end up with poor cellular function.

So sleep at least 7 to 8 hours a night and you just have to get on a good sleep wake cycle. I'm sure in your programs you've got people on a good routine and cycle.

That's probably first and foremost, definitely early on. And then the sleep studies and wearing the CPAp or the oral device, whatever it is that you need to keep your airway open at night, just absolutely critical if you're not breathing through your nose efficiently at night, you're not getting enough oxygen to your brain, which is essentially creating brain damage each night, mostly.

And then sunlight. So sunlight, it turns out vitamin D is important for mitochondrial function. It promotes mitochondrial biogenesis, the reproduction of new mitochondria, and it increases our oxidative capacity.

And just like houseplants, we want sunlight. So how often do you have people with dementia, Alzheimer's that go live in an assisted living facility and never go outside again?

Oh, it's heartbreaking. That's why we created Marama. Yes, I love it. I'll pull up over there and the ladies will be like sunbathing outside and following the sun around the house.

It's so cute and sweet and yeah, we aim to have yoga outside and it's devastating, to that, people are parked in front of TVs and sun cake and ice cream.

The exact opposite of what you want for brain health. Yes, yes. So next would be red light. Let's just sunlight and now red light therapy. And I'm pretty sure you have red light therapy or.

Yeah. Yeah. So there's this photo bio modulation that occurs in our bodies. Red light goes deep inside the cell. It increases cellular energy and antioxidant production.

It stimulates, cytochrome c oxidase molecules. It's just important for the electron transport chain. It produces ATP. Mitochondria make more energy when we're exposed to red light.

So that is super beneficial. I try to tell my clients to get into red light at least three days a week. What's your what's your recommendation? If you're the violet, which is like a cap.

And we'll do that six days a week. Amazing. Yay for our residents. And then we have the juice play, which is like more of a full body lab. We'll do that five, six days a week.

Get appropriate glass. I'm dealing with people who don't live in a place like Marama. Shire day is just designed around getting as many of the things for brain health as possible.

So yes, don't beat yourself to that standard, but getting some red light, like you're saying, I love it because up the street here we work with in San Diego.

So in Carlsbad, here there is a place, called Fitness Genome and they have all these things set up. So it's kind of like the casita we have in the circuit.

We have it. We're on a but you can come in from the community, you can buy a package and you can do ten sessions of live 2 or 10 sessions of two light.

And so then you're not having to invest in it at home until you've seen that. Like, you can get benefit and you can create time and space in your, in your life to do it. Good.

So good. So okay. So we keep going. Keep going. What else can we do. So the next thing mitochondria or mazes. So this is where you put mild stressors on the body.

So things like cold therapy. So like cryotherapy or cold bathing or hot or heat therapy or even intermittent fasting creates this. And so this actually improves mitochondrial function when you have like this kind of stressor that hits it, it's pretty cool.

And so that will help. Shivering. So cold exposure shivering will recruit your mitochondria to generate heat. So you may do cold showers or baths or cryotherapy.

Do you do that too in your, process? Do it it marama as much. But I certainly do it personally. Yeah, I can see if you have somebody with some cognitive decline that might.

That might be really hard for them to understand. Why are you putting me through this really uncomfortable thing? Yeah. All right, ladies over there. They love sunbathing, but, like, putting it cold.

No, no, they won't even go outside if it's not so much. Well, if you are trying to prevent if you don't have any kind of cognitive decline and your main goal is prevent it, add that in everything we do, this kind of comedic effect, this, this hermetic graph, like you're describing, where you want to stress the system so that you get more resilience.

These are things that if you take them too far, they kill you right? You don't get enough if you serve, you know, you know, a hypothermia, hypothermia if you get too hot or cold and the body doesn't work.

But if you stress the system enough, what you get is a more resilient system. And so we also do this of oxygen. So we do contrast oxygen therapy with exercise.

And a very similar thing where you get autophagy. You you get rid of those senescent cells. You get better circulation and you get a higher mitochondrial density.

Purcell. Over time and more energy. So better detox. So the laundry list of great things about it is long, but it takes some effort. Exactly. Then, the next thing would be nutrition.

Supplements are nutrient supplements, which at least in my practice, I like to test before I just start recommending all kinds of nutrients. I'm sure you've had people in here talk about supportive mitochondria and nutrients.

Things like CoQ10, L-Carnitine, B vitamins, magnesium, alpha lipoic acid, curcumin, D ribose. I mean, there's a whole bunch of things we can use, but we really want to know what do you need and what would make sense.

So something like an organic acids test to figure out what your mitochondria need is this is probably something that you have routinely in your practice as well.

Yeah. And I would I love this hearing you say that all these things are great for mitochondria. And a lot of them are really good for the brain too. There.

Yeah, yeah yeah, baby. That's because your brain's full of mitochondria. They all sit there. There's a lot of overlap. They they increase the enough. They, you know, they they send signals to the, to sirtuins.

So there's, there's a kind of overlap when we're getting these really good nutrient dense foods and high polyphenols. And all of that sends signals to the brain that helps the cognitive function totally.

Well, that's pretty much my list. Would you add anything to it? I love it, no, it's super comprehensive, and I think you're doing amazing work in the world, and it's inspiring and exciting.

And I just love the energy that you bring to all of this. It's so fun to be around you and to learn from you, and I'm so grateful to you for sharing. Tell everyone I know you're doing them.

You're going to be the host of the Mitochondrial Restore Your Mitochondrial Matrix Summit that airs in August, so it's after yours. So that'll be coming up for everyone.

So look for it in August. Excellent. And then tell everyone where they can learn more about your practice. Yeah. So I have a completely virtual functional medicine consulting practice.

And you can find me at Lora Frontier Procom. You can find me on Instagram at Laura dot Ontario. That's like the great frontier with an O on the end for Ontario.

Yeah. So, find me there and, look forward to connecting with people. Wonderful. Amazing. Thank you again, Laura, for spending this time with us, sharing your expertise and wisdom.

It's been an absolute pleasure having you. My pleasure. By Heather.