Ep 182: Genomics Testing Explained: Finding Real Answers for Autism, ADHD, and Chronic Health Issues Transcript

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Introduction to Genomics

Hi everybody, it's Dr. Laura with Connect My Brain. So glad that you are tuning in. As I promised, if you're following the progression of podcasts, you heard me say last time, we're going to talk about genomics.

And so today that's what I'm going focus on because it is such an incredible lab test that offers detailed information on an individual. And it's a blueprint, and it will tell you exactly some variants of sequences that have been found in that individual Now, the big difference here is when I'm saying the word genomic, The first thing you probably are thinking of is genetics and this is not a genetic test.

A genetic tests is really looking at the very specific chromosome exchanges from mom and dad that went into their baby and or same thing for you. from your parents into you.

Very specific sequences and markers. My hunch is that this kind of science was pushed or kind like a tumbleweed. It was brought to the surface because of the wave of autism.

and maybe also other neurodegenerative type diseases that there must be a very specific gene that can be identified where an individual will have a particular problem.

Genetics vs. Genomics

In the 80s, it was the wave of autism. And before you know it, that number just escalated very high to where even today the numbers are quite alarming.

where some, it's always depending upon who's your reference, but some references will say it one in 20, 25 kids. Some will even say 30s. Out in California, they're saying one and 13. Okay, these are very big numbers, okay?

And the problem with trying to identify A gene responsible for autism is that you can't have a genetic epidemic. So you cannot have all these parents passing the exact same gene and causing the numbers to go up.

So pharma still wanted to know, hey, there's gotta be a gene. Well, they never found a jean. But what they did find, and this is a world that is really opening up and more people are coming on board, just like the world of peptides.

So peptide is is very popular word today. Peptides are proteins. Now we can readily get peptides that can enhance the healing process inside of the body, kind of giving it a jolt to the nervous system and really the neuroimmune system in order to repair and heal.

So proteins are known for that. Back to our genomic test. As they were looking at all these different people and trying to identify a gene, what they did find was sequences with different numbers, different letters.

and identifying it in the gene that created, wait a minute, these are also part of function. But it doesn't mean that every single person with a label like autism is going to have the same variances.

Epigenetics and Family Influence

So there could be similarities There could be common variances, but what they have found is that these are actually sequences that are more reflective of an entire generational line of people.

And even more importantly, very highly, highly influenced by epigenetics. Now, epagenetics means EPI, something

that plays upon the gene. This can be inside of the body and it could be on the outside of body.

So I'm going to try to break this down even more because I really want you to understand. So let's take the generational ancestral piece, which, you know, especially as a chiropractor, sometimes listening to all this information as if it was all just found out.

Sometimes it's kind of nagging at me because I've been a Chiropractor for 30 years. And I have to tell you, even in my education 30 years ago, and it would be more like 34 by the time you add on the years of education, specifically in the area of chiropractic, Well, there's so many things that we were talking about way back then.

How does a family influence the wellbeing of an individual? Now, I do think traditional medicine does pick up on that because when you're filling out history forms, it will ask you family history.

But are we really diving in to that picture? I think even today, with this kind of information, not even all of traditional medicine is diving in quite like they should.

They're still looking for these genes and these borders. Now, there are lots of people in traditional healthcare growing all the time that are looking at the influence of not only the family history, but what people are exposed to.

If we make a couple of highlights from the year, so depending upon when you are actually listening to this podcast, it's the end of 2025. And wow, what a year.

So we've talked about Red Dye 40. I can tell you as a chiropractor, I've been telling people, as well as my colleagues have been, telling you have to have clean food, in your body.

And anything that either you cannot enunciate or pronunciated, then you shouldn't have it. Anything artificial, you should not have. This year, they came out and they banned Red Dye 40. Well, it was 35 years ago that they actually knew it caused cancer.

And I get a little fired up about that because I do think it takes so long for information to come to the surface and I think about how many people have actually been harmed.

And and i do you think there is validation in that thought process because I think it's San Francisco has actually launched a lawsuit against the big food industry for making American citizens sicker.

and how their marketing plans or strategies have targeted, especially parents to children, but everybody, not just children.

Food, Vaccines, and Health Awareness

And how that has impacted our health care system, how we are considered the most obese country, our mental well-being, and our ability to thrive and flourish.

So that's going on right now. There is an awareness that is really coming about. What just happened a couple of weeks ago? CDC has said No longer does an infant, a newborn have to have the hep B vaccine.

My gosh, that's huge. I got to be honest with you, I wasn't sure in my lifetime that I would ever hear something like that. But it is an awakening. And I'm really hoping that we continue.

Now, you can still get that vaccine if you want. But bottom line is, I do believe that, we should be able to choose what goes in our body and what doesn't go in your body.

And if we are truly investigating these pieces of information then we can make an educated decision. I never want anybody to just do anything that I tell them to do.

i've worked very hard over the course of well i'll go back even though practice has been 30 years but 34 years really learning really learning the body and what it needs.

I think I shared this one time with you on a previous podcast, but when I was in grades one to four, kindergarten to fourth grade, I But then I, over a summer, I worked this concession booth and my father was, he was a salesman and I had to stay with him for the summertime and i gained a lot of weight.

And it was very difficult time, fifth grade to eighth grade, and had no idea what to do. I didn't even have the idea that I should do something. It wasn't until I went to college that an amazing conversation just introduced, well, you can lose weight.

All you have to is know what your target heart rate is. You have do exercise at this level for 20 minutes. If you want to get your heartrate up, so you can burn that excess fat off of your body and then you know you, can lift weights to get stronger and it was education that allowed me to completely turn my own frame into a completely different structure and I did it got really into it that actually became a competitive bodybuilder back in the mid 80s and if it, was one of the happiest times of my life because I had fruit of my labor right there in front of me.

And it's been such an important part of life that it has even transitioned into how I practice. One piece of that is we make all the kids do aerobic activity here.

Now, I'm not trying to make them competitive bodybuilders, but what we are doing is, we're teaching. We're teaching what target heart rate really means.

And it's all based on your age. We teach the formula. Then when they get done, we're doing pre and post oxygen saturation.

Personal Health Journey and Exercise

Where is your oxygen level? Where's your heartrate before and after? And we are teaching them that what this does for their body is it is helping to take those stress chemicals, turn it into fuel, and then there's a magic potion that literally gets developed in the brain called brain-derived neurotrophic factor that comes in and literally enhances the to learn something new.

And that one little element is so powerful and it is an epigenetic influence to their body because it's helping their hippocampus, which is on the side of your brain, and it has multiple functions.

But three to highlight are cognitive flexibility. How flexible can we really be? Are we able to learn something new? And that is something the brain desperately needs and wants.

Patterns will become mundane, and that's going to impact epigenetic changes. So cognitive flexibility, personality, personality. And that's a huge one, especially because the research is talking about how from the COVID shot, the spike protein is actually targeting the hippocampus.

One of the things that is happening to some is it is altering their personality, as well as the third part that I'd like to highlight for the hippocampus is long-term memory.

So this is a huge component. And pull out of there. So we're talking about epigenetics and its influence on us. It's influence either on altering sequencing inside of our genes or it's enhancing things that may be a risk today It's affording you a pathway of how to change something.

And that's the beauty behind this genomic test. But let's pull a couple pieces out of there so we can really understand the influence of doing aerobic activity and what this is doing for our brain and how it is improving the ability for us to be flexible in our thought processes.

Okay. Wonder if You're a child and you're learning a new math, which they're constantly changing the styles of

math that they are teaching kids. And so maybe last year you learned something one way and this year they doing something different.

You have to have cognitive flexibility to be open in order to see how to flip something around. And for a child, that can make all the difference in the world in making learning exciting.

It's one of the questions I ask the kids all of time. What'd you learn in school today? And I will tell you the majority of them, probably over 95%, tell me nothing.

I learned nothing." Now that can also just be a kid answer, but I do find it interesting. So we want to improve that cognitive flexibility. And so one of the things that we do here at Connect My Brain is we're putting cognitive challenges into the activity.

Now, you can see some of those if you go over to our Instagram, Connect My Brain, and look at some the reels that we have. One of the other things that would love for you to do for us, if don't mind, is follow us.

Unfortunately, they have changed the platform and now you have to have a minimum of a thousand followers in order to do an Instagram Live. And I think we're hovering around 800. So if you like us and it's something you wanna do, step out and follow us.

but you can see cognitive flexibility exercises right on our wheels.

Aerobic Activity and Brain Flexibility

So that's an epigenetic change. If I take you from your aerobic part, and now I'm going to introduce you into something that is playful, like what you see on Instagram, now You're expanding that cognitive flexibility.

You are creating epigenetic influences on your brain. And that's where the power lies for all of us to take where we might be and go into another place.

So cognitive flexibility. What about personality? Well, first, let me give you an example as an adult. Because we do see adults here, because we're one of the people in the area that do offer neuro and biofeedback.

And there are not a lot of people, in this area, that that. We do attract adults into the office, and we love that, So I'm gonna first give you an example of someone in their 20s, because it's been interesting watching the personality of that particular age group.

And the things that I see about them is glued to the phone, lots of vertical scrolling, which is going to give a burst of dopamine, which is the one that makes you feel good.

One of the young men that that are here called it the happy drug. Yes, it is. It's the Happy Drug. So can you see that if I practice that, I'm just vertical scrolling all the time, then I am giving myself a boost of dopamine all time.

However, there's a caveat. Yeah, you feel good now, However, if you reach metabolic capacity, so just because you can personally drive something doesn't mean that's the way you're supposed to do it because it's meant to be in balance.

Sometimes it needs to up and sometimes it just needs be at homeostasis and some times it'll drop because something else needs come on. So it isn't meant, let's just plug it in and run it like a bubble machine.

It will reach metabolic capacity. And then what will happen is you will need more. So the stakes go up. You start looking for something other than just vertical scrolling.

This is where it's driving things like addictions. Addictions on so many different levels. so many different levels, gambling, pornography, eating, drinking, recreational drugs, addiction.

So that can also be an epigenetic change, but obviously not in the positive direction. What about a person who is in a business world and you have to have that cognitive flexibility to either run a team, or create an idea because something isn't working and you need to move the needle, the stats in another direction.

And instead of soaking in the part that isn' working, you have to have that cognitive flexibility in order to see a bigger picture. In order see big picture from your right brain and then break down the details of the left side of your brain.

So these elements that we're talking about, they're not just about children. They're about function. It's about how our brains are functioning based on the environment that give it.

And this doesn't even begin to touch. What's going on in the chemistry of the body? What is happening with inflammation? That is another huge driver of epigenetic change.

And really, in a world of science, this is more what they focus on is the chemical part. And when we look at these genomic tests, they're literally identifying if individuals have a much greater predisposition to heightened inflammatory conditions.

Dopamine, Habits, and Addictions

Now, you know, I'm sure we've all heard that term, inflammation, but I don't know that we really understand how connected inflammation is to neurology of the brain.

In fact, how they ride along beside each other called the neuroimmune interface. And they're supposed to have a elegant dance of balance. And if there is too much inflammation, then the parasympathetic nervous system would come on with the vagus nerve that innervates every part of your body and bring things under regulation.

But if we have these variances like in what's called our mast cells, which are part the inflammatory process, or this one called interleukin 1. If we cannot inhibit those, those can remain very active and literally begin to lead the brain in the wrong direction.

An example with children is the strep infection. I cannot emphasize this one enough because still so many people believe that it's a typical childhood illness.

We're just going to throw some antibiotics at it and move on. And even one round of strep can cause havoc. Strep is a bacteria that is quite intelligent and it can mutate and hide and they can cross the blood-brain barrier.

And when these children have had like motor tics or they're just chronically ill, they are chronical emotional, their chronicle sensitive to so many of our special senses like the visual part, the auditory part.

then it's going to be able to seen in a brain map. And now we can identify that neuroimmune interface and the pattern that we see on the brainmap. Again, we've talked so many podcasts on this idea of chronic.

Chronic is anything that's gone on for longer than six months. And when things are chronic, we are literally surrendering real estate in our brain. Your brain is going, okay, I got to keep this stress response going.

Therefore, and I'm going to take away from cognitive flexibility. I'm going to take away from your emotional balance, which is absolutely going impact your personality.

And then the longer this goes on, yeah, learning and memory are very difficult, not only for children, but this is actually something. that has been going on even in the adult community or it came from their childhood and now they are adults or they're 40s and 50s, and they can remember they have felt this way their entire life.

Well, you're setting up a pattern in that brain and you have to put the whole thing together. You have to put the mechanics together, like your vision, your auditory, physical body, that aerobic activity.

You need to look at the chemistry, you need be able to connect the dots, and you have look to the brain. I have families that I work with remotely and trying to get them, look, it's really time.

Inflammation and the Neuroimmune Interface

You need to come over here for an intensive because we've done a lot of groundwork, but we need Even to my fellow chiropractors, when you are working with somebody and maybe you do just focus on the mechanical part, maybe, you're really focused on getting people out of chronic pain.

If we don't see the pattern in the brain, And if we don't work on the brain simultaneously, you're missing, a part of the equation. And I do, I have children in this office with high strep antibodies and have chronic patterns in their brain.

Even though on outside, they're making changes. There is more that is needed to be done. in order to get the brainwaves to know that there is a change inside of that body.

So what about the group in their 20s? What does that look like for them? Well, I've had some young adults also have in history the same thing, the strep.

But I'm not limiting it to streps. Any viruses and bacterias that you have, in your history, can have the potential to alter the neuroimmune interface.

Then it is, what's going on with the thought life? What's happening for you in the world? And the group that's in their 20s, they're having a hard time.

Everybody is talking about how it's very difficult for them to find jobs and they thought, Hey, I graduated from high school, went to college, did all the things I was supposed to do.

Why can't I find a job? You think that might lead to some chronic stress? Absolutely. And then what about the parents and then 40s, 50s and 60s wherever you are?

What's happening for your health? All of us, children too, are at this risk. of early degenerative changes in our brain if we don't know exactly what's going on inside.

Now, the other element of this genomic test, wow, it matches the personality of the entire world because everybody wants everything corrected yesterday.

When you think about that you can go to your phone and you could be in Bali in three seconds just by looking at it, we have literally practiced how fast can we get it.

We can order just about anything and sometimes it can even be here within two to four hours. we literally practice this idea, have it now, speed it up.

I'd love to say that this is all we need and that's going to make the biggest change for all of us, but it is a step because when we do these genomic tests, and it's just a saliva test, that is what's so beautiful about it.

When we do these tests, we get the risks and the benefits. We focus on the risk. You can look through the 200 pages and see all the benefit that you also have.

Using Genomic Testing in Practice

But if those risks, which I have already found over and over again, completely match what it is that we are trying to clean up in an individual, When you work on those, you can change.

That's the beauty behind a genomic test. And these tests are so powerful, they actually will give us the exact

recommendation of the supplements that will work for you.

So the guessing comes out of it. The other thing that it offers is if you do need a medication, it's also going to tell you what medications are gonna work.

Now, a couple of times I've said that particular sentence to someone and they go, well, I already know. I did a genetic test. Again, this is not genetics.

This is genomics. We actually did this on a very little person and it did it completely matched what happened to this little And the very first thing I said to the parent, if you follow exactly what I tell you to do, I want you redo this test about five to six years down the road based on a developmental window, because where the little person is right now, it'll be about 5 or 6 more years before they're at another huge developmental And you should see a difference in those risks.

Now, we don't have to wait that long to see the changes in the individual, but we're talking it's a blueprint. And if it is going to change because you're doing the right things, We should be able to prove it.

And that's what's really changing the landscape of how we manage the chemical component, the body's chemistry, and the personal physiology of an individual.

I'm really excited about this test. I've run it several times now, and the information has really changed the trajectory of the practice to where we're seeing a better landscape to follow.

Here at Connect My Brain, we are a three-tier approach, mechanical, chemical brain, just like you work. I am always looking for the best of what to do to serve my patients, my community, the world.

We can work with you even remotely, especially if you would like to consider some of this lab work. So check out the website. There's many things on there to get you plugged in very easily.

But if you've got a chronic case going on, it doesn't take anything to fill out a form and reach out and say, I just want to have a conversation. I'm going to be the one that talks to you.

And we are going connect the dots of your personal story. That is one of the gold standards in my office, is I learn so much from the conversation. I can put the pieces together that will literally describe what it is that you're going through or your child is going though.

That is one of the compliments that I've received over and over. How you figured out our child only through an assessment, one-time visit. And it's because we look at the developmental process of everyone, even the adult person, because you were little one time as well.

So thanks for tuning in today. Make sure you check out other podcasts. Go follow us on Instagram. go check our Connect My Brain membership. We look forward to working with you.

Be blessed.