



Dr. Jill Carnahan - 00:00

Hey everybody. Welcome to Resiliency Radio, your go to podcast for the most cutting edge insights integrative and functional medicine. I'm your host, Dr. Jill and with each episode we dive into the heart of healing and personal transformation. Join us as we interview medical experts, world leaders, thought leaders and all types of people to enhance your information and knowledge to improve your performance and longevity. I am so excited each episode to learn right along with you and I always like to bring some of the best leaders and innovators in our field. Today's no different. You're going to hear from Dr. Dennis Hooper, who is the inventor and founder of Real Time Labs, the original mycotoxin testing company. And you're also going to hear about his new company, Silver Gene, and what he's doing to help us with diagnosing and treating autoimmune disease.



Dr. Jill Carnahan - 00:49

Before I get into the bio, I just want to remind you, if you haven't yet hit subscribe on YouTube, please join the 570 + that thousand subscribers here on our channel. It helps us to reach more people and bring you great news and guests and new innovators each week. If you're on another podcast platform, would you please stop and leave us a review? We greatly appreciate it. And to all of you, all of those of you who are already subscribed, just a thank you. I love coming on every week and knowing you're listening and all the information that you give me as far as feedback and comments. If you want to leave comments below if you're on YouTube, I do read those and comment and and reply myself. So you can always leave.



Dr. Jill Carnahan - 01:31

If you have questions or concerns or want more information, let me know here on YouTube or wherever you listen to podcasts. Before we introduce our guest, I also want to just remind you that I have curated a wonderful group of things to help you with your health. @drjillhealth.com you can find everything you need to perform better and improve your health. If you're suffering from chronic complex illness, mast cell activation, Epstein Barr or any number of other issues including autoimmunity, you can find products and services there. You can also find our amazing line of Beauty Products, Dr. Joe Beauty and I always love to show you one or two things on the show. This is one of our big sellers and because it's summer when this episode's coming out, this is a sheer defense. Tinted spf. It is a popular product.



Dr. Jill Carnahan - 02:18

We sold that multiple times. We're back in stock now. It's a great product to put on your face before you go out. There's a tinted sheer and tinted. So if you don't want that color, that's fine. I love putting it on if I'm going out for a run and really don't want any makeup but want the sunscreen. So check that out@doctor Jill health.com okay. Let me introduce our guest, Dennis Hooper, M.D. PhD, graduated from University of Utah, Salt Lake City in 1971 with a BS degree and the University of Missouri, Columbia, 1973 with an Ms. In microbiology from University of California, Davis in 1982 with a PhD in microbiology biology. He's well credentialed. He also received his MD degree from University of Nevada, Reno in 1983.



Dr. Jill Carnahan - 03:00

He has really been a profound change maker in our world as he developed the Real Time Lab mycotoxin test several actually decade or so ago. We're going to talk about that and we're also going to talk about his new company, Silver Gene, and how he is impacting the way we diagnose and treat autoimmunity. So let's welcome Dr. Dennis Hill Hooper. Dennis, I am so excited to have you here on Resiliency Radio. We talked briefly by phone and I've known you in our spheres for many years, but I heard a little bit about your background and story, which was so fascinating. I didn't know about that. I always love to start with story. And we're going to talk about a couple of the companies you've started in your latest venture, which I'm so excited about, called Silver Jean. So stay tuned, guys.



Dr. Jill Carnahan - 03:45

We'll have links in the show notes about all of this. But first, let's start with your story. How did you get into this work?



Dr. Dennis Hooper - 03:51

Okay, I grew up in central Nevada, a small town called Ely, and it was a copper mining company and it was just north of the nuclear bomb test sites in the 1950s. And I lived there for 17 years before I went to school at the University of Utah. And I was I got a bachelor's in microbiology and I wasn't sick when I left Ely to go to Salt Lake. But immediately after I got through my bachelor's degree and moved to Missouri for my master's, I started getting hyperthyroid and I got Graves disease. And I didn't know what caused this. And my mother had it and some of my relatives on her side had it. So we figured it's all genetic.



Dr. Dennis Hooper - 04:48

But the more I studied this and the more I heard about my classmates in Ely, I found out that maybe Half of them, if not more, had autoimmune disease. And so many of them had died of cancer, either thyroid cancer or just breast cancer or whatever. And I started looking into this, and I think they. A lot of them, this was due to exposure to the nuclear dust that went over White Pine county, where Ely is. And they. They sued the federal government, the county residents sued, and were called upwinders from this nuclear dust. And so everybody that got any kind of thyroid cancer, that's the only one they would cover with the Congress was they paid 50,000 if you died of thyroid cancer. Well, dad, and I don't have thyroid cancer. But as I got older, I developed more and more autoimmune diseases.



Dr. Dennis Hooper - 05:56

I developed rheumatoid arthritis. I developed skin disorders of Michael Jackson skin disorder. I just. I had numerous issues with gut problems. And then my last thing was about three years ago, well, five years ago, my endocrinologist said, you have elevated liver enzymes. And I said, what would cause that virus? That's what I thought. And they just kept getting higher. And he said, you've got to go to a hepatologist. And so I went there, had a liver biopsy, and my liver was completely cirrhotic. And I didn't. I didn't drink enough to have a cirrhotic liver. So they diagnosed me as an autoimmune hepatitis. And over a period of six months, I went from having a weight of around 225 to 230 to 170. And I. I was near checking out, and they told me, get my affairs in order.



Dr. Dennis Hooper - 07:04

And I have a joke about that, but I won't say it here. Anyway, so. And we. They measured a MELD score, which is. They look at your sodium, potassium and. And all your lactic everything. And my meld score when I first went in was 13. They said, well, we can't do anything until it gets over 20. Mine jumped to 27, I think, in less than six months. And so they told me I had to have a liver transplant. And they put me on the list in March, and I deteriorated so fast by July 28th. I had a liver transplant in 2024, and I've just felt great ever since. However, I watch autoimmunity. Yeah, Just immensely. I watch everything about inflammation on myself as well as other patients. Which takes me then to. Why am I in this? Because I was a pathologist.



Dr. Dennis Hooper - 08:04

I was trained at the University of Nevada at medical school, and then I trained in the US Navy at Naval Hospital San Diego as an as a pathologist. And all the time I was very interested infectious disease because I also had a PhD in microbiology, but I was interested in immunology. So I took a lot of courses at Stanford and tried to figure out how this immunology is working with all these things. And when I was in the Navy, I started looking more deeply into all the autoimmune tests that they did, which is very good for laboratory medicine. But when you talk with the patients, they said they go from doctor to doctor to doctor and they never get a good diagnosis. I did the same thing. I went to an endocrinologist, I went to a gastroenterologist, I went to a rheumatologist, everything.



Dr. Dennis Hooper - 09:01

And they couldn't. I wanted to look at the whole thing.



Dr. Jill Carnahan - 09:05

Yes.



Dr. Dennis Hooper - 09:06

And I was very concerned about environmental toxins. So I, in the Navy, I started looking at all these heavy metals and things, but there was no interest there to look at that, even though they were using them for everything. So when I got out, I moved to Texas and I worked with a very well known doctor, Dr. Bill Ray Environmental Health Center. And he liked my ideas on looking at mycotoxins.



Dr. Jill Carnahan - 09:36

Yes.



Dr. Dennis Hooper - 09:37

So he let me come into his lab. I validated the test and I stayed there as long as I could without edging him out. And so I moved into the same building as he was and I built Real Time Lab. And we invented the tests looking at mycotoxins in urine.



Dr. Jill Carnahan - 09:56

Yes.



Dr. Dennis Hooper - 09:57

And then we developed it further. We patented them and we grew from 2005 to selling it to us bio in 2024. We grew from having two specimens a month when I first started and doing the janitor work and, and when we left, were doing about 150 mycotoxins a day.



Dr. Jill Carnahan - 10:21

Yeah.



Dr. Dennis Hooper - 10:22

And that was a lot of work. And we also became a Covid center, which I wasn't too proud of, but I. But it helped doing the COVID test and we did very well financially, but it still didn't help me understand autoimmune and environmental. So I talked with a lot of patients and come to find out that I'd say 85 to 90% of everybody I consulted with mycotoxins had autoimmune disease of some kind.



Dr. Jill Carnahan - 10:55

Yes.



Dr. Dennis Hooper - 10:56

So that's when I sold. I started Silver Gene and it's taken me silver. It's taken me since September of 2024 to get it off the ground because I wanted to develop a good microarray test for just inflammasomes and autoimmune. And then I wanted to really study all the supplements that are available that could help those pathways. So that's what I did. And Silver Gene is now getting off the ground. We do nutritional genetics, we do certain supplements that we like compared to what is available. And we're always open to new supplements that are helping these pathways in the enzymes. And then we also do. We have something called Silver Gene Academy, where I put all the updated research in there throughout the whole world. And there's India and all these places. So it's pretty exciting.



Dr. Dennis Hooper - 12:06

And I, I really want to work with the clinicians and the patients and caregivers like you. You offer so much to the patients. And if we can do something to help these people because they're, I don't want to say the word desperate, but they are.



Dr. Jill Carnahan - 12:25

Yeah.



Dr. Jill Carnahan - 12:27

Dennis, I love hearing your story. And again, we heard little bits of it before and I was so excited to share this here because clearly your life has been like this mission. And what often happens is you're in the right place, the right time, and you have curiosity, which you clearly had. And then something happens like Real Time, which it wasn't accidental, but in a way. And I just want to say, many people, if you're a clinician listening out there and you do functional integrative medicine or mold related illness, you know the importance of urinary mycotoxins. But for those average people that are listening out there that don't know, I kind of want to emphasize the massive impact you've had on the industry in functional medicine.



Dr. Jill Carnahan - 13:03

As a mold expert, Real Time Labs has been the leader in mycotoxins and the one I trust the most for the accuracy. There's a couple other people out there doing it now, but truly, even with our group ici, we've all come to the conclusion that this is really your test had been, you know, the best validated. And so all of us really like to use it. And it's been profoundly changing for me as a clinician because a couple things, what happens is I will hear the patient's history. I might do a visual contrast test. And without a lot of expensive labs, I have a very clear idea and I would say I'm almost 100% accurate as far as suspecting mold or mycotoxins as part of their illness or autoimmunity.



Dr. Jill Carnahan - 13:42

But then to have a test like Real Time labs, mycotoxins is so powerful because there's something about the patient seen on paper even if I'm already pretty sure about it confirms my supposition and my suspicion of mold toxicity. But then also for the patient, there's something about visually, because I'll tell you understand this. Well, I'm sure many patients I might say, have you had any water damage? Have you had any leaks in the washer, dryer? Or what about your attic? What about your crawl space? And I'll go through all the questions, but most people, if you just say, do you have mold in your house? They'll say no, because number one, they either don't know it, number two, they're in denial, or number three, they're not ready to deal with the consequences of what it would take to remediate.



Dr. Jill Carnahan - 14:21

So it really is helpful for me to have some evidence that I say, you know what, it is good idea to go look at this in your house. So I just want to say publicly thank you for that work. I'm so excited about silver gene. And then the other thing I want to say is I grew up in a farm in Illinois. I was just talking about that before we came on. And I'm one of five children and there's two of us girls, myself and my sister, who's seven years younger. I had breast cancer at 25. She had thyroid cancer at 27. Two girls, same environment. So clearly this is relevant because there's genetics there. Yes. But there's an environment, and it sounds a lot like your history with toxicity, which is my favorite thing to talk about, which environmental toxic load.



Dr. Jill Carnahan - 15:03

And I consider myself almost a toxicologist or an immunologist in that realm.



Dr. Dennis Hooper - 15:07

Well, yeah, we do too. We consider you.



Dr. Jill Carnahan - 15:09

Oh, thank you. But it's relevant as you talk about your exposures and thyroid and breast and endocrine. Right. This is very relevant because those of you listening out there have these issues with your endocrine system. Those are the canaries in our body that sense the environmental insults. And if you have genetics, which. We'll talk about that today with silver gene that are susceptible to environmental insult, it really does come together. The last thing I'll say, and then I want to get let you go on, is what. What you mentioned about autoimmunity. So many of you patients out there might have been, you know, seen your ana, that's antinuclear antibody. That is usually the screening. It's kind of, I would say, the doorway. And autoimmune, you might have been tested and it's positive. And then your doctor says, oh, we don't know what's Going on.



Dr. Jill Carnahan - 15:53

Let's send you to a rheumatologist or to some sort of a specialist and the rheumatologist, over and over, I hear this story. They look at the ana, they ask about symptoms, and they say, well, you don't qualify for lupus. You don't really have ra. Let's just check this in a year. And they send them home with nothing other than let's check this in a year. Do you want to talk about that? Because that's what we're both on this mission to change that, which is how do we find the causes of these dysfunctions before they become disease?



Dr. Dennis Hooper - 16:21

Well, that exactly is what happened to me, even in the Navy, that when I had my. My thyroid was going up and my TSH was going down and. And nobody seemed to understand that. And they said, oh, it'll go away. And it didn't. And they couldn't give me more thyroid, so they didn't know what to do back then.



Dr. Jill Carnahan - 16:41

Yeah.



Dr. Dennis Hooper - 16:42

And then it burned out so bad that it went from hypert.

Dr. Jill Carnahan - 16:47



Hypo.



Dr. Dennis Hooper - 16:47

Yeah. And I. I've got Hashimoto's. Then I got swollen eyes and I got. Oh, it was a mess. And I had to take Synthroid. I became resistant to the Synthroid. So now I have to take a different one, made in Europe or something. I don't know where it's made, but it's helped me tremendously over the past five years. But what I have been telling patients is if you don't get what your answers, there's nobody that knows you better than you.



Dr. Jill Carnahan - 17:21

Yes.



Dr. Dennis Hooper - 17:22

And if you think there's something wrong, pursue it and just write letters, call people, go to people like Dr. Jill and find out the clinicians that care. Now, I know clinicians who will be listening to this and they'll say, I'm insulted because I'm not caring. No, that's not. That's not what I'm saying. But you've got. As a clinician, you've got to tell them you care, make them feel you care, and make them feel like you're going to look at something else. When you get an A positive, there's tests in the laboratory that you can do to go on. On that same specimen and say, oh, this is Sjogren's, or this is Smith's antigen, or this is a lot of different antigens that are in those. Those same test tubes. They. They don't ask for that test.



Dr. Dennis Hooper - 18:21

And so it sits there in the lab and they get rid of it in five days. But you can redraw them. But anyway, the point is, if the patient is sick and you hear them, listen to them and think of something, and if you don't know it, refer them to somebody that may know it. Like, and I'm sorry, mds, if you hear this and don't like it, I'm an md. But I have found that the naturopaths are very up to date on some of the integrative medicine. More than we are.



Dr. Jill Carnahan - 18:57

Yeah.



Dr. Dennis Hooper - 18:58

And that's what I appreciate about Dr. Jill is that she's an MD and she has gone into this area, and it's tremendous. And people like that.



Dr. Jill Carnahan - 19:09

Yeah.



Dr. Dennis Hooper - 19:10

So don't quit, Jill, please.



Dr. Jill Carnahan - 19:13

Thank you. I don't have any plans, and I want to keep, you know, highlighting people like you and other docs. And I have personally learned a lot from naturopaths. Totally agree with you. They're often on the cutting edge of some of these things. And I just have a passion for educating more DOs and MDs to do the functional deep dive because many docs are becoming more discouraged with conventional medicine and the, you know, grind. And so I think that there's an opening, whereas never before to teach and educate, you know, good clinical doctors to change.



Dr. Dennis Hooper - 19:46

Yeah. And the things that I found out at Real Time is that when we started, nobody believed it. There was. There was a lot of reference to a lot of laboratories that were incorrectly doing quality control, quality assurance. And that's what I've stressed in the Navy. I was chairman of the department there. And you could. You have to do good quality control. And if you don't do that, you can't do good validations. And validations are tests that you do. You have a specimen of urine. You put so much mycotoxin in the urine. And if you say, like, I'm going to put 1 milligram in, I better detect 1 milligram or my test isn't any good.



Dr. Jill Carnahan - 20:28

Yeah.



Dr. Dennis Hooper - 20:29

So I did that with Eliza testing and I did it with Mass Spec.



Dr. Jill Carnahan - 20:33

Excellent.



Dr. Dennis Hooper - 20:34

And Eliza testing was much more repeatable.



Dr. Jill Carnahan - 20:38

Yeah.



Dr. Dennis Hooper - 20:39

Than I could find with Mass Spec. And I still. No matter. We worked on Mass Spec for years in Real Time Lab. We spent so much time, money and tech time, and we never could get it. And Real Time Lab is still working on it after I've left.



Dr. Jill Carnahan - 20:55

Yeah.



Dr. Dennis Hooper - 20:55

And I looked at results of other laboratories that are doing them, and I just don't see good correlation between the patient's health and what they find in Mass Spec. It doesn't matter who's Doing the mass spec. Yeah, it's the mass spec that is the problem. And I'll give you one example. Mycophenolate. Mycophenolate is a mycotoxin. I take my phenolic so my liver won't get rejected.



Dr. Jill Carnahan - 21:25

Right.



Dr. Dennis Hooper - 21:26

There are laboratories in the United States that test for mycophenoli in urine. And I also do medical legal expert witness for court. And I look at both, well, all the laboratories that they provided to me, and there's some labs that have mycophenole, huge amounts. Well, when I talk with the clinicians about this microphenolic, I asked what is their TMB cell count? What is their inflammatory response? And they. They don't do those. And I think there's a way that we should divide, devise a protocol to look at this. And they don't do that. And when I run my. I take a lot of mycophenolate, 250 milligrams twice a day. However, when I run my urine sample for mycophenole, it's low.



Dr. Jill Carnahan - 22:19

Yeah.



Dr. Dennis Hooper - 22:20

Now, why do people have such high amounts and they're not that sick.



Dr. Jill Carnahan - 22:24

Yes.



Dr. Jill Carnahan - 22:25

Hey, guys, Just popping in for a few seconds to remind you if you have not yet checked out our movie documentary, Doctor PatientMovie.com is where you can find it. Of course, you can purchase it, you can rent it, you can watch it for free with commercials on YouTube or Tubi. And you can also get it if you're a member of Amazon Prime. So check that out@doctor patient movie.com and if you do watch the movie, I would love to hear if it's impacted you. I think it's particularly relevant if you're a physician or clinician or any sort of healthcare practitioner as we go deep into the things surrounding how we practice medicine, how health is affected in my own personal journey. So check it out@doctor patient movie.com. Okay, back to the show.



Dr. Jill Carnahan - 23:10

And as I love that you're talking about this, I think it's one of the most important things. I want to just clarify for those listening what you just said and how important. So mycophenolic acid is a mycotoxin, which means it's an excretable thing from mold spores. Certain things like aspergillus and other forms secrete mycophenolic acid. And your lab Real time is checking multiple different trichosathines and ochratoxins and other including mycophenolic in the urine. And some of these other labs are doing as well, now, what you just said, I don't want people to miss. You're an organ transplant recipient, your liver. And we use the drug CellCept is the brand name, which is mycophenolic acid. So it's a mycotoxin given to patients just for the sake of suppressing your immune system so you don't reject this new liver.



Dr. Jill Carnahan - 23:54

And I think that's so profound, because when people understand, like, what these mycotoxins have the power to do, the good news is it saves lives for liver transplant patients. And same with penicillin. Right. The bad news is this is a massive immunosuppressive mycotoxin that if someone has it and they aren't in a liver transplant, it will affect the

immune system profoundly, which is why there's such a connection with mold exposure and infections like Epstein Barr or Borrelia or Babesia or other things, Mycoplasma, that pop up after mold exposure because of that weakened immune system effect. But I think what you're saying is, as physicians, we should look at this whole system, which I like to do.



Dr. Jill Carnahan - 24:33

I look at those T's and B cells and say, if there's a level that seems high of mycotoxin in whatever test we're doing, we should look at the immune system and say, are we seeing a correlation with immunosuppression?



Dr. Dennis Hooper - 24:43

And.



Dr. Jill Carnahan - 24:43

Because if we are not, then that could be an inaccurate lab result.



Dr. Dennis Hooper - 24:47

And if you ask them to do an IgG.



Dr. Jill Carnahan - 24:50

Yes.



Dr. Dennis Hooper - 24:50

And IgM level, they're normal. And you go, how can that be with a microphenolic that's off the chart.



Dr. Jill Carnahan - 24:57

Yes, yes.



Dr. Jill Carnahan - 24:58

So I love that you said that, and I love that you talked about elisa, because I've been teaching on mycotoxin testing

urine many times, and I talk about your lab and the elisa. And once again, what I usually say about real time is it is by far the most likely accurate as far as not getting exposures that are not real, like getting excessive levels that may not may or may not be really there, as in the mass spectroscopy. So I couldn't agree more on all levels. And I'm seeing it not from the lab perspective, but as a clinician, just saying, is this test valid in my clinic and does it reflect the patients? I see. So I really appreciate that.



Dr. Dennis Hooper - 25:34

Yeah. And the same thing. We invented another test to look in the houses they called the Emma, and it was using the same ELISA test for the mycotoxins. And then we use PCR to develop much Similar to what they do in the ERMI test. But I wanted to only use the pathogens that are in humans and maybe a couple animals and not all the 36 that Irma uses because it's so misleading. The docs just don't know what to do with that.



Dr. Jill Carnahan - 26:07

And if they don't know how to interpret, I couldn't agree more. So we.



Dr. Dennis Hooper - 26:11

We did 15, and I explained them very well, I thought. And people still attack EMMA because. Oh, well, it's. You report out numbers of. Of spore counts or something. I don't know what they. What their complaint is. But my issue is if you have a number of Stachybotrys and you have Ketomium and Aspergillus in that house specimen, you got to find out where they are and get rid of them.



Dr. Jill Carnahan - 26:41

Yes.



Dr. Dennis Hooper - 26:42

Because if you do the toxins at the same time, they'll have trichothecines, they'll have gliotoxin.



Dr. Jill Carnahan - 26:49

Yes.



Dr. Dennis Hooper - 26:50

Have zearalenil. And all those things are very effective against your immune status.



Dr. Jill Carnahan - 26:58

Yeah. I frequently do these multiple different tests of the home and the body, and I like to see some correlation. And when I do, I know I'm on the right track. And I love that you have the new EMMA test, because often what I do with that is say we have an environment. We know there's likely mold if the EMMA is positive with mycotoxins. I always say it's like if you had a fire in the middle of your living room when you put out the flames, and you take that burn carpet and tear it out and get rid of that. But meanwhile, there was smoke coming off that fire infecting your curtains and your books and everything. And I think of it as similar to mold and mycotoxins. You can clean up the wall cavity that has mold in it.



Dr. Jill Carnahan - 27:33

But if that mold was just spewing out mycotoxins, which are smaller than 2.5 microns, like less than the size of a virus, and they're in your paper, in your rugs and your curtains, you must also clean that up. And I like using the EMMA to determine how contaminated that environment is and to what level. We need to do a small particulate clean or a fog to make sure that those mycotoxins aren't hanging around and causing problems in the patient.



Dr. Dennis Hooper - 27:57

See a lot. I went around the country for a long time teaching the people who test, and they. They didn't like the idea that if you test and you don't find organisms, but you find the mycotoxins yeah. Doesn't mean much to them. They don't know how to get rid of them.



Dr. Jill Carnahan - 28:17

Right.



Dr. Dennis Hooper - 28:18

And so they stopped using the Emma because it was misleading to them. And I think because. Well, I won't say what I. But I. I wish we could teach more of even using the army, but using the mycotoxins.



Dr. Jill Carnahan - 28:36

Yes, both. I think both. And. And there's a. Like you said, it's a very.



Dr. Dennis Hooper - 28:40

Or you could use Emma or the ermi with mycotoxins from Real Time. And I know many labs that are trying the mycotoxins, and I don't think they have good quality control.



Dr. Jill Carnahan - 28:52

Yeah.



Dr. Dennis Hooper - 28:53

But I think they should learn it because there's a. There's so many people that need their help.



Dr. Jill Carnahan - 28:58

Yeah.



Dr. Dennis Hooper - 28:59

Just having one lab is gonna. If you do it right, you'll be inundated.



Dr. Jill Carnahan - 29:03

Yeah.



Dr. Jill Carnahan - 29:04

That's very kind of you. Because he was a former lab owner. Could say I'm the. You know, we're the best. Which you probably are. But I like that the more. The more out there, the better. Well, let's shift to Silver Gene, this new company. I'm really excited to learn more. Do you want to talk about how you integrate environmental experience, exposures with the genetic testing and what. And, like, how you chose the genetics to put on the panel? Like, how it actually looks.



Dr. Dennis Hooper - 29:26

I went. As I told you, I was interviewing, and I do consulting on what. What we have to. What do you do to get rid of these mycotoxins? And first line of defense, I always said before they. I referred them out, is start taking glutathione, liquid liposomal glutathione, because liposomal is in every one of our cells, and it's in every one of our pathways. And if you don't take. If you are insulted by an outside source, your light, your glutathione goes down in your cells, and it takes months to replenish it. So I said, take the liposomal glutathione and then go see your clinician and call me if you have any problems. And it worked. But then I would ask them to please tell me if you have autoimmune.



Dr. Dennis Hooper - 30:18

And I'd say the large percentage of it was autoimmune of some kind, mostly thyroid or rheumatoid arthritis, skin disorder. So I decided, well, I'm going to look into this. Doing nutritional genetics because their nutrition sucked was not good.



Dr. Jill Carnahan - 30:36

Yeah.



Dr. Dennis Hooper - 30:37

And so I learned of this naturopath in Pittsburgh, and his name was. Now I see when you get old, you forget People's names. And he had developed all this nutritional genetics. I'll remember it in a minute. I talked to him about once a week.



Dr. Jill Carnahan - 31:01

Bob Miller.



Dr. Dennis Hooper - 31:01

Bob Miller.



Dr. Jill Carnahan - 31:02

Bob Miller. Love Bob.



Dr. Dennis Hooper - 31:06

I told him, you got to teach me and my colleagues how to interpret all this data that you have. Well, he has so much data. And when he started talking to me, I said, bob, you're like a gps. You go over here and you go over here, and you go here. I want narrowed things on inflammasomes because that's what's a problem with this autoimmune. So we developed, he and I developed a program to work on inflammasomes and how they're related to autoimmunity. I said, okay, now I want to put that in a company. I want to get your program and buy it from you and then have you as my consultant. And. And so that's what we've done. We've invented a program that. Well, he's invented the program. I bought it from him. And we're.



Dr. Dennis Hooper - 31:58

We're going to take the inflammasome area and show which autoimmune diseases in their history are closely tied to these enzymes in their nutrition. And then we also ask them their evaluation of their homes or their work. Have you been exposed in any way, not just mold, but heavy metals or anything. And surprisingly, we're getting huge numbers of arsenic contamination and iron in their water. And just. And when you look at this, you can see why they're feeling sick.



Dr. Jill Carnahan - 32:42

Yeah.



Dr. Dennis Hooper - 32:43

So we do the nutritional genetics and we get that with the history. We do a consult there, and then we combine them. And Bob has developed a number of supplements that I like, but I've studied them significantly in the literature to show what they do. And then I get their drug relations. What are they taking? Like, I'm taking mycophenolic. Well, mycophenolic. And some of these supplements, will they interact and be a discord to me. So we approached AI and so every time we get a result of a. Of an enzyme deficiency or a variant, we look at that with the AI program we developed and the supplements and the drugs, and we combine them all together and it takes much less time. And then we used to do.



Dr. Dennis Hooper - 33:44

But it's still something we do on our own brains, AI and see if they correlate and much surprise they do. So we help the patients that way, and then they can come back and talk with us in consultation, anytime. And then we refer them to. To docs that see the patients on the hoof, so to speak. I don't see patients, but I, I love to evaluate their programs and their labs and give them advice. Not, I don't diagnose and I don't treat. As a pathologist, you don't want somebody who just looks at dead bodies to treat you.



Dr. Dennis Hooper - 34:28

But I love looking at the labs and that's why I do well in the legal cases, because I can study all the different medical notes from every doctor that's seen that patient and help them say, look at, this is what you need to look at and do. So I think Silver Gene will become a known entity, much like real time did. Might take us a while, but it will teach clinicians and patients. And we're dedicated to both direct access testing and docs. But if we direct access testing patient, we refer them to the docs in their area that will listen to us.



Dr. Jill Carnahan - 35:15

Okay, that's what I was going to ask. So exciting. So if you're out there and you're just consumer, you're very interested, you can go directly to Silver Gene, get that test. If you're a doctor, you can order it through your office. I really like that. And I think that's where everything is going is direct access. Because patients deserve to have that. It's just that they might need a little bit of assistance when they get to the interpretation. And that's right, guide and direct. And the nice thing is about labs like yours, and like you said, with AI, I think there's going to be way more comprehensive interpretation information for the patient. But this sounds like a really powerful tool, especially if you've been diagnosed with an unexplained autoimmune disease where your doc's like, oh, you've got a positive ana. We don't know what else.



Dr. Jill Carnahan - 35:53

Because the core thing that you and I both agree on, that I just want to reiterate, is environmental toxic exposures are huge drivers to autoimmune. So what happens is there's this thing called molecular mimicry and a few other ways that this can happen. Where our body might see lead or heavy metals or arsenic or mold or mycotoxins or pfaos or phthalo parabens. And this gives this immune system this trigger, and the immune system starts to be aggressive and try to actually take care of that insult. But instead it attacks self, so attacks the thyroid, attacks the joints, attacks the brain. And I think we're seeing more and more of this because as you and I started our story, me on the farm and you in that small town that had the nuclear drift. These environmental exposures affected both of our health.



Dr. Jill Carnahan - 36:39

Me with breast cancer at 25 and you with a liver transplant and those at sequelae of the thyroid. And what we're saying is just that environmental insults are maybe invisible, but they're becoming more and more prevalent. And if we have genetics that don't detoxify appropriately or take care of these insults, or an immune system that's overly aggressive to a non threatening insult, we can develop autoimmune disease.



Dr. Dennis Hooper - 37:03

And that's why I like working. And I was very thankful that I could meet with you and talk with you and do this podcast because I think people like you and I have stories and help patients that we should form some kind of. That we can teach other doctors what to do because we're all so busy we can't see everybody.



Dr. Jill Carnahan - 37:30

Yeah, yeah.



Dr. Jill Carnahan - 37:31

Gosh, I get so excited about that because I've realized in the last several years for sure, I can only see one one patients. And I love my clinic. I'll never stop that. But the, my biggest way to impact is not only to bring great guests like you on the podcast and share that, but also I want to be a teacher to the physicians because I know that in that way, the more I can teach this and spread the word, the bigger the impact we can all have as far as how medicine is done.



Dr. Dennis Hooper - 37:57

And we need to develop a legacy. Bill, Bill Ray was very good at what he did, but he didn't develop. I kept telling him, develop a legacy of teaching and he never did. And now he's gone.



Dr. Jill Carnahan - 38:14

Yes.



Dr. Dennis Hooper - 38:14

And so there's very few people that do what he does.



Dr. Jill Carnahan - 38:18

Yeah.



Dr. Dennis Hooper - 38:19

Or did. And so we need to develop a good relationship with the clinicians that are doing this that we can teach them. And the good people who are inspecting.



Dr. Jill Carnahan - 38:31

Yes.



Dr. Dennis Hooper - 38:31

Want to learn how. If they inspect. Right. They could. A lot of people. Oh, I don't want to do that because then if there's no mold, no mycotoxins, I don't make money. Well. And they've told me that. Well, are you in it just for the money? Well, yeah. So.



Dr. Jill Carnahan - 38:48

Oh boy, then that might be the wrong field. Right.



Dr. Dennis Hooper - 38:52

So we want to instill in them good learning behaviors and we want to be good teachers. And I'm not going to be around forever. And I think a legacy of things we did in real time and in Silver Gene is going to help clinicians like you and the younger clinicians coming up that are integrated. When I went to the. I went to San Diego to an integrated meeting last week. And I went around and talked with laboratories that were doing mycotoxin tests. Who do you have that can we can talk to about your test? Not one of them had an md. Not one of them. They have a naturopath, but they. They on some. Yeah, but that's it. And so they need to have. And then do you refer them out? Yeah. No.



Dr. Jill Carnahan - 39:45

Wow.



Dr. Dennis Hooper - 39:47

Because then if. If they tell one about one doctor, this doctor over here hears about it and then he gets mad.



Dr. Jill Carnahan - 39:53

Yeah.



Dr. Dennis Hooper - 39:54

That didn't refer him to me. Well, that's.



Dr. Jill Carnahan - 39:57

Oh, goodness. I. Dennis, this is a big pet peeve of mine because I know the more I help, even if my neighbor is two blocks down and they're doing function medicine, if I go down to his door, her door, and say, how can I help you? It only benefits me, all of us and the patients. I do not like that competitive. And there are a lot of people out there, that little box and they think very small. But the truth is, the more I can spread the word, the more you can spread the word, the more we can help our colleagues to lift them up. We all rise. And it's not. There should not be this competitive thing. Unfortunately there is. But even between labs and things.



Dr. Jill Carnahan - 40:28

But it's like the truth is, the more we really lift one another up, the more we all win and the more we are able to really change and transform. Transform medicine.

Dr. Dennis Hooper - 40:36



And that's why if patients or doctors are hearing. Yeah, this, they should notify us that they agree with that.



Dr. Jill Carnahan - 40:43

Yes.



Dr. Dennis Hooper - 40:43

So we can develop a bigger program.



Dr. Jill Carnahan - 40:47

Yeah.



Dr. Jill Carnahan - 40:47

Gosh, I get so many ideas about how to transform and change. And just talking to you is exciting. Well, where can people find, I'm sure, your website. Do you want to give us your website? And. And it sounds like if you're a clinician, you can sign up for a clinician account to. To give it to patients. If you're a patient who's interesting, you can go to the website and get it just for yourself, right?



Dr. Dennis Hooper - 41:06

Yeah. And it goes through me. So I review everything that the clients that if they direct access people come through.



Dr. Jill Carnahan - 41:15

Perfect.



Dr. Dennis Hooper - 41:16

Our website is www.silvergene llc because that's what it is. So silverjean llc.com.



Dr. Jill Carnahan - 41:27

Beautiful. So we'll include that in show notes or wherever. If you're driving. Don't worry about taking that down. It'll be in there. That's so exciting. So in the next six to 12 months, what else do you see? Obviously, Silver Gene, we want to get the Word out to clinicians and practitioners. Is there anything else you're working on developing in the process right now?



Dr. Dennis Hooper - 41:44

Well, I went around to a number of labs. None of them wanted to do what Dr. Miller was doing. Too many, too many pathways, too much. And when he sends them out to a laboratory in New Jersey, the laboratory takes eight to 10 weeks to turn around. And I said, no, that isn't going to happen.



Dr. Jill Carnahan - 42:07

Yeah.



Dr. Dennis Hooper - 42:08

So Silver Gene is opening its own lab here in Dallas and we're going to have a seven to ten day turnaround time.



Dr. Jill Carnahan - 42:16

Oh, that's amazing because I know I've waited around for this test before.



Dr. Dennis Hooper - 42:21

Oh, it's terrible. And so have I. I've been sending stuff through and I tell Bob, I cannot do this. I can't. These patients are, they may be dead.



Dr. Jill Carnahan - 42:33

But every day matters.



Dr. Dennis Hooper - 42:36

Yes. So my, we're meeting with Thermal Fisher tomorrow. We're going to do the microarray here at Silver Gene. And then the program for Bob is coming into Silver Gene that we're purchasing from him and then we will be able to read them out here in a short period of time.



Dr. Jill Carnahan - 42:59

Excellent.



Dr. Dennis Hooper - 43:01

So I hope that we can, you and I can work together more on all these aspects because I think we can offer the patients more. More stuff.



Dr. Jill Carnahan - 43:11

Yeah, I couldn't agree more. And I think patients are wanting more complex information because they're having more complex situations. So Dr. Hooper, thank you for your work in the world because you have really, I mean as a clinician who does environmental and mold toxicity, you have changed my life because you first offer the real time and now I think Silver Gene will do the same. And I just want to say thank you publicly for your work and your curiosity in going down this path and in all you've brought to our world. Hey everybody, thanks again for joining us for another episode of Resiliency radio. Really love Dr. Dennis Hooper and excited about his new testing with Silver Gene. I hope you'll check that out@silverjean llc.com we'll leave the link in the show notes if you want to check that out.



Dr. Jill Carnahan - 43:57

And as always, you can join us every week for a new episode. We have new episodes released every Wednesday. If you haven't yet hit the subscribe button on YouTube or left us a review wherever you watch or listen to podcast, that would be greatly appreciated and I will see you again next week.