



Your Functional Medicine Expert®
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[#133: Dr. Jill interviews Deborah Zelinsky, O.D. on Brain Mapping](#)

Text:

Dr. Jill 0:13

Hello everybody, and welcome to another episode of Dr. Jill Live! I'm super excited as always. My guest today is really, really special—you are in for a treat. You're going to hear about some things that you maybe never knew existed and how powerful they are in healing the brain. First, I want to introduce my guest, Dr. Deborah Zelinsky. I will tell you a little bit about how I met her in just a minute. She's an optometrist noted worldwide for her work on neuro-optometric rehabilitation. Currently, she serves as the founder and executive research director of the Mind-Eye Institute, based in Northbrook, Illinois, not too far from where I grew up. Her global reputation is due in part to her discovery of the use of eyeglasses to alter the sound location and the subsequent development of the Z-Bell Test—the patented test that allows her and her team to prescribe lenses and use other optometric interventions that balance and process central and peripheral eyesight while synchronizing the integration between the auditory and retinal sensory systems. You're going to hear all about this.

Dr. Jill 1:18

We've talked a little bit before. I want you to share a little video shortly about your background, some of your patients' testimonies, and stuff. I think that'll do more for your bio and who you are than anything I have to say. But I first want to just frame this. A good friend and colleague that we both know referred me to you. It was interesting because I don't have autism, and I have never been diagnosed with ADD. But in my experience, after I had a mold-related illness, I was writing a book—the book is coming out in March now, so you have something to do with this—[and] all of a sudden, I was having a lot more trouble focusing and concentrating when I was on screens and writing my book. I could do it, but it just took a lot longer, so I went to see you this year. I'm wearing the glasses you got for me, and I noticed that the first month back from your clinic, wearing these glasses, I was like my old self; I was able to focus and concentrate. And again, you know why. You're going to tell us about some of those pathways, but you're using these inputs into the brain basically to change brain function. You work with brain injuries, autism, [and] ADD, and you're going to share a little bit about that. But let's have you share your slides.

First, just share a video. You did this recently about your clinic, what you're doing, [and] some of the cutting-edge stuff.

Deborah Zelinsky, O.D. 2:31

Thank you, Jill. This is a video that I had put together because I won an award for innovation, and it was right when COVID hit and they canceled the entire award dinner, so we had to put in pre-done videos. So let me share my screen. [I'm clicking on] 'share this sound,' and 'share this screen.' Here you go.

Dr. Jill 2:56

Beautiful. Make it large so we can see it on full [screen]. Perfect.

Deborah Zelinsky, O.D. 2:59

Is that okay? Can you see it there?

Dr. Jill 3:01

Beautiful. Yes, perfect.

Video 3:05

[Deborah Zelinsky, O.D.]: My name is Deborah Zelinsky. I'm an optometrist who began my career in the 1980s as the director of a low-vision clinic in Florida. Today, I serve as the founder and research director of the Mind-Eye Institute, a practice that began in my own home in 1992 as the Mind-Eye Connection and grew internationally, drawing patients from nearly every continent of the world.

[Patient # 1]: I had a brutal, serious headache for over a year.

[Patient # 2]: I've had multiple concussions—three of them within the last year and a half.

[Patient # 1]: My vocabulary went down to that—probably about a third-grade level.

[Patient #3]: My friendships were slipping—I couldn't maintain them. I couldn't communicate very well. Eye sensitivity—I couldn't drive at night.

[Patient # 4]: My emotions were gone. I couldn't add, subtract, divide, [or] multiply.

[Patient #1]: My quality of life after the accident went down to, well, no quality at all.

[Patient #5]: I started, almost, speaking backward. It was like I was always playing catch-up when somebody was speaking to me. She puts the whole package together. I feel like Dr. Z has been put in my path; she's my personal miracle, and she saved my life.

[Patient #1]: Health issues, autism, brain injury, dyslexia—I mean, there are so many different facets that what she's doing is unbelievable!

[Patient #6]: The biggest thing that Dr. Zelinsky does is push the limits of science. She takes what she knows and what she understands about the brain, about the eye, theorizes what possibility could be there, evaluates all of the patients individually, and then combines all of that knowledge together to assess what she thinks the underlying problem is.

[Patient #3]: I walked out with the biggest smile on my face. And Deborah Zelinsky gave me my life back.

[Deborah Zelinsky, O.D.]:

Basically, optometry is a really fun profession. I'm hoping that the rest of my career can be used to mentor other people as optometry continues to evolve. Thank you so much for this nice award!

Dr. Jill 5:10

Thank you for sharing, Dr. Zelinsky. First, I love that. I love [the part at] the end there—that takes a whole lot of talent to talk, and to record, and to be juggling. Amazing! You've mentioned a little bit about this starting out of your house. We're going to dive into what you do. You've got some slides to share there too. But how did you get into this? And how did you start to discover that our peripheral retina has a lot to do with the brain and the inputs and can actually change how we behave and how we see the world?

Deborah Zelinsky, O.D. 5:41

Well, I was always good at math. When somebody asked me what I was going to do with my life or what I was interested in, I told them I liked puzzles, I liked math, I liked people, [and] I was interested in blindness. They said, "Why don't you become an eye doctor?" I checked out ophthalmology, and I checked out optometry. [In] ophthalmology, surgeons were up at six in the morning in hospitals looking at bloody eyeballs, injecting people with things, and doing surgery. And optometrists were doing math puzzles all day long, and you didn't have to wake up at six in the morning to do it. I chose optometry as a career because I wanted to be with people but [still] use the math skills that I had.

Dr. Jill 6:25

Amazing. And I've seen it because I've been to your clinic. I just want to say, for those listening who don't know, that you really are a genius in your field—I'm sure you've been told that by more people than just me—[with] that skill of the calculations and all that it takes to do what you do. If you want to share a little bit more of your slides, you can talk us through the way that you evaluate a patient and [the way] you look at this. I think the more people understand, it starts to make sense. For me, it made so much sense: "Oh, of course, we have inputs into the brain through the eye," right?

Deborah Zelinsky, O.D. 6:55

Well, you asked me earlier how I thought about the peripheral retina having so much to do. I watched a doctor who was another optometrist named John Thomas. This was 40 years ago when overhead projectors were out, and he had a slide sheet that he would put on the projector and show: "There are signals going straight through your eyes, and that's what you see with." Then he would take the slide off and put another slide on the projector and say, "But there are these other pieces connected to the eye that go up and down for motor movement." Then he would take that sheet off and go back and forth; he went back and forth to the two sheets. I remember going back home after this lecture and saying to my aunt, who was a medical illustrator, "Isn't there a way to draw lines going sideways and lines going up and down in the same picture?"—because this guy spent a half hour flipping back and forth. She said, "Well, sure, you can draw it." She drew for me lines coming into the eyesight that would go up and down for the spinal cord reactions. From there, I created a really neat picture, started reading neurological books, and then expanded on that—what's actually happening in the eyes. Then, 20 years later, in 2007, I wrote a chapter for a book on all these connections. Basically, all my research started from there.

Dr. Jill 8:23

Wow. Your curious mind. You were asking questions, which I think is what drives all of us—discovering things and new ways of doing things. You really pioneered this, though, especially in the way that you assess patients. Tell us just a little bit about the bells—the infamous bells and sound—and how you actually assess a patient for what they might need with their lenses.

Deborah Zelinsky, O.D. 8:49

Sure. In 1992, I was playing with a friend of mine that I'd known since kindergarten. She was telling me how her ears were so good and her hearing was great, [and that] as we got older, if her eyesight would get worse, she still had her ears to fall back on because she has diabetes. She was worried [that] when she was older, she might lose some of her eyesight. But her career was based on auditory. So, I said, "Prove how good your ears are." I had something that I made a sound with and had her close her eyes and try to find it; she found it easily. Then I had these weird prism goggles sitting around because I was an optometrist, and I thought to myself: "I'm going to just play a joke on her. I'm going to put these weird goggles in front of her, and it's going to make her see things in a really weird place, and she'll reach wrong and I can laugh at her." But she misunderstood me, so she closed her eyes a second time because she had closed them the first time. So, I was ringing the sound and she had her eyes closed, and I remember seeing that and thinking, "Well, the glasses won't do anything when her eyes are closed. But I'm lazy, I'll just do it, and I'll redo it in a minute with her eyes open." When I had the glasses in front of her closed eyelids, she couldn't find the sound. The way she thought the sound moved was the same way the glasses had pushed the light. Then I turned the glasses upside down in all different directions, and I made her hear the sound to the left, to the right, higher, lower, farther, closer—depending on what I put in front of her closed eyelid. So that's what started the Z-Bell testing. At that time, in the early 90s, there wasn't any particular literature that showed ears and eyes were connected to each other, but it kept working on all my patients. I went to different physicians and said, "Hey, these glasses are changing auditory function." People were telling me, "There's no connection," "you're crazy," [and] "it's a fluke." It's like, "But it can't be a fluke; it's on everybody." You were going to say something?

Dr. Jill 10:51

I was going to say it's amazing because you're describing your discovery of what you're doing. It's so amazing how that was almost accidental. But again, you observed, and you're like, "Oh, this is interesting." And again, I've done that in a whole different realm. Scientists make observations first, and then we're like, "What

if there's something to this?" And again, now you've developed a whole science of really helping people, and that's one of the ways you still test today, right?

Deborah Zelinsky, O.D. 11:16

Absolutely. But today, there's the science that backs me up—totally. I was going to all these optometrists and ophthalmologists and people and saying, 'Hey,' they were like, "There's no research showing this." Then I went to neuroscience conventions because neuroscientists did exactly what you just described, Jill, where they said: "What about this? What happens if this...?" They ask a question and then figure out an answer. I went to Europe in 2000 and taught a bunch of optometrists in other countries. We ended up creating a certification program for just the bell part. And now what we have at the Mind-Eye Institute is a five-level certification type of thing. We have in-house optometrists that have five different levels [of testing], not just the one level of bell testing. It just kept ballooning because there's more and more research now proving and demonstrating that the ears and eyes are connected. They keep finding new things that the retina is doing, which I show on the slides when we're ready.

Dr. Jill 12:28

Yes. Let's go there next. But I wanted to say that this makes so much sense because I know that the gut affects the heart—everything is connected, right?—things that we never used to put together. And it's no surprise that you can use the ears, the sounds, the eyes, and all of this to diagnose those pathways. Tell us really quickly—and maybe you want to go into the slides because it might be there; we think about vision as our 20/20, or central vision versus peripheral [vision], because you're actually changing more of the peripheral—what's the difference between central and peripheral vision, and why would one affect the brain more than the other?

Deborah Zelinsky, O.D. 13:02

The peripheral eyesight is designed to keep you safe and aware of what's going on, but it's beneath the conscious level. You also use it to navigate. Like in the old Dick Van Dyke Show, there's a footstool in the way your peripheral eyesight is what keeps you from tripping over it. You'll see it out of the corner of your eye and then walk around it. The peripheral eyesight judges space and how far away you are from things. It does a lot. It runs beneath the conscious level in the same way that swallowing would. If you have a sore throat, you're aware of it every single time you swallow. If you don't have a sore throat, you have no idea how many times you swallow during the day. Peripheral eyesight is turned on all the time, but it's muted

[so that] it's just enough to keep you comfortable. If you're in a safe environment, your peripheral eyesight is pretty much dormant, but if you're in an uncomfortable environment, the peripheral eyesight is on to protect you from sudden movements or scary things. The peripheral eyesight turns on and off, and the signals from it are faster than the central eyesight signals. The 20/20 [mark] was designed 160 years ago to standardize eye exams, but nowadays, with computer screens and scrolling, shifting gears, and internet surfing, we use our eyes in a completely different way than they did in the 1860s. The testing was for stationary targets.

Dr. Jill 14:41

I want to use myself as an example and ask you a few questions because I think this is relevant. Obviously, you've got me these glasses—they've been super helpful. Both of my filters are on the left eye. In hindsight, after I saw you and got home, I realized I could focus better. [I have] two questions, and I'd love for you to tell me maybe why this would be: I would always have more trouble reading on screens than on paper. So that was one interesting thing. I preferred paper. But probably more interesting with this left side is that depending on which side of the car I was in, if I was the driver, I felt much more comfortable. I didn't get headaches, [and] I could have a conversation with someone to my right because there are no filters here. But if I was on the passenger side, I would get more nauseous [and] dizzy. I didn't like looking at that person. Would that explain these filters on this side and how my brain affected the inputs from both sides?

Deborah Zelinsky, O.D. 15:24

No, it wouldn't, but it would affect the hemispheres of your brain. If somebody were on your left as a driver and you were a passenger, it meant that your right hemisphere had more activity in it. Then, if they were on your left and you were the driver, it means your left hemisphere would have more brain activity. It really would depend on who you are as a person. I'm a very right-brained person, so if I had damage to my left-brain hemisphere, it wouldn't affect me as much as somebody who was very left-brained. But the filters don't have that. The filters are blocking off some of the peripheral activity, and it's just making the inputs more balanced.

Dr. Jill 16:04

So, maybe you would technically make someone more creative if you blocked their left brain. [laughing]

Deborah Zelinsky, O.D. 16:09

Technically, yes. [laughing]

Dr. Jill 16:11

[laughing] Okay, let's go on to your slides because you do such a good job of explaining what you do with them. And you can just share those whenever you're ready.

Deborah Zelinsky, O.D. 16:19

Okay, here we go. Perfect. Let's see. Okay, so here is [the book] *The Retina*. This is a book, and it's called *The Retina: An Approachable Part of the Brain*. The retina is actually in the lining of your eye. It's a part of your brain—it's made out of brain tissue. People don't realize that, and they don't realize that all the body systems connect with the eyes. You were saying the gut and the eyes connect, and the gut and the heart connect—everything's all connected. There's a Marcus Welby episode from 1969, the year that the Society for Neuroscience was founded. [In] the Marcus Welby episode, a person comes to Marcus Welby, the doctor, saying: "Thank you, Dr. Welby, for telling me to get new glasses." He says, "Ever since I got my new glasses, my digestion has been so good." Somebody in 1969 knew that new glasses would affect digestion in the gut, but here we are 50 years later and the eye care professionals don't really know that.

Dr. Jill 17:33

Yes, it's so true.

Deborah Zelinsky, O.D. 17:38

This is what I was telling you earlier. The chart that everybody is used to was invented 160 years ago, and the instrument that's used to block off your eyesight was invented 120 years ago. Nowadays—let me put this down here—the newer inventions in 2021 are very sleek-looking and computerized, but they're doing the same thing the 1904 invention was, which was holding all these lenses and blocking off the peripheral eyesight. The big key is that in all of this testing, you're testing central eyesight. And according to Patrick Quaid in Canada, [concerning] the central eyesight, when you get an eye test on a stationary target, it's only targeting 6% of what you're looking at. With your peripheral eyesight, 94% of your environment is pouring in but not that 6%. The 6% is your central eyesight, and it comes after you aim and focus on a target. The 94% comes in at a subconscious level where you're not paying attention to it.

Dr. Jill 18:49

And what you're seeing, that 94%, is affecting every system, right? So, if you can alter how that comes in, it might change someone's ability to think, talk, walk, or whatever other input. Is that correct?

Deborah Zelinsky, O.D. 19:01

Yes, it is. It changes. Our prescriptions at the Mind-Eye Institute are governed around this 94% because there's faster processing than the 20/20 concept. So, we have a lot of people with symptoms from head injuries or just learning problems. They come in seeing 20/20 or sometimes better than 20/20, but we might make them a little less than 20/20, but they get more comfortable. So people have a choice of: Do you want to see the speck that's way down on the bottom and have headaches every day, or be one line up so you can see something a quarter of an inch tall from 20 feet away but not an eighth of an inch tall and all your symptoms will go away? That 20/20 was designed to standardize eye care, but it wasn't designed for people with head injuries, biochemical dysfunctions, autonomic dysfunctions, or autism. There are so many things that affect brain activity. I mean, in the 1800s, not very many people were on medications, and now a lot of patients come in on a lot of different medications. Those are affecting their processing also. The medications affect brain processing from the inside, and the eyeglasses affect brain processing from the outside, and sometimes they can have a complementary effect.

Deborah Zelinsky, O.D. 20:29

People have to realize that 20/20 means you see at 20 feet what the average person sees at 20 feet, so half the population is worse, and half the population is better. But that's still only testing attention on a non-moving, high-contrast target. And it usually tests one eye and then the other eye separately. But then they say: "Here are your glasses." Now go out and walk around and see moving targets with cluttered backgrounds, and that's not assessed in regular testing. The general population is fine with this kind of test. It's been around for 160 years—it works. But our practice at Mind-Eye Institute takes people with brains that aren't quite working properly. Then those people need extra testing, and that's what we provide—the extra testing. So, we look at the peripheral eyesight in terms of: Either it's always on or it's always off. If you live where it's always turned on and there's a floodlight, then those people are labeled 'ADD.' If you live on the other end, where you just have this penlight [and] turn off the peripherals, and you live in your own little world, those people are labeled as having autism, and there's a spectrum. So, what the average person should do is be somewhere in the middle and sometimes turn the floodlight on and sometimes turn the penlight on. For instance, once I dropped an earring in a hotel room and had to find the earring. I had to turn the floodlight on, and my eyes

were used in a completely different way than when I'm proofreading something for commas, colons, periods, and type font—then I turn the penlight on. So, you have to go both ways.

Dr. Jill 22:13

What we really want is flexibility, right?—because inflexibility is where you get stuck and have disorders. So, you're creating more flexibility in that range, right?

Deborah Zelinsky, O.D. 22:23

Absolutely. We call it the four A's. Here it says, 'attention' and 'awareness'—that's on the outside. And then 'adaptability'—like, you're saying flexibility—'adaptability' and 'attitude' are on the inside. Patients with a great attitude like yours do really well. And the patients with the victim attitude of "Nothing is going to help me," "I can't see; it's horrible," "I don't want to work so hard," they're not going to get better. And we have "Eyesight"—the 20/20—"is at the end of a very long chain of reactions." So that 20/20 comes after the unconscious sensory integration of your eyes and ears, subconscious processing, and then conscious processing. That 20/20 is the culmination of you pointing your eyes, looking at a target, determining what you're looking at, figuring out what it is, relating it to what you know, and then saying what letters you see. There's so much that happens before that. You have this image forming eyesight, the central eyesight, to see details, and peripheral eyesight to be aware of a background. And you have non-image-forming, non-eyesight signals which link with many, many other things. Now, this is what I had my aunt draw way back in 1990. She actually drew this in 1992, but we modified it in 1996. But the signal is going straight in for eyesight and up and down for motor systems. And at that time, it was only known in that posture. But since that time, discoveries about retinal processing and what the retina is connected to [continue to occur].

Dr. Jill 24:03

Amazing. Brain injury, autism—any sort of spectrum. And like I said, even though you're not a mold expert, if people have issues from a chemical toxin or something, you can probably see changes that would help them. But with stroke or those things, do you see changes with motor [function] as well?—because you're showing me those pathways.

Deborah Zelinsky, O.D. 24:24

Absolutely. We work with stroke victims pretty often. There are links between endocrine functions, autonomic functions, [and] limbic functions. And stroke patients would have problems knowing where their legs are, where their head is,

head position, judging spatial relationships, [and] processing with memory—it's all connected. The interesting thing is [with] non-image forming [vision], there are these types of things. And then, eventually when those are comfortable and you feel safe: "Do I care?" If you don't care about something, why are you going to put effort and energy into aiming and focusing on a detail? You'll get people who've been to practitioners, and they're told they can't aim their eyes. Well, they can't aim their eyes because they don't care about what you're handing them. You're saying, "Look at a pencil and watch it come toward your nose." "I don't care about the pencil; it hurts; it's too much effort; I don't want to." So, there are a lot of things going on at one time. After all of this is put together, you have [to make] a final motor decision of: "What should I do about it? Do I reach? Do I point my eyes? Do I move? What do I do?" This is what Mind-Eye is doing. The Mind-Eye Institute looks at all of those things, including "Who am I?" because your personality traits also make a difference, and then space and time judgments, and then determining what an object is and what to do about it. It looks at the immune functions [and] the body's survival [functions]. There are five different certification levels. So, when you're talking about the bell, that's just one aspect of awareness of space through an auditory sense.

Dr. Jill 26:06

What other kinds of testing are you doing in the office? I've seen this, so I know it. But what does it look like for a patient?

Deborah Zelinsky, O.D. 26:14

We do a lot of testing. We're looking at visual perceptual skills such as being able to pull a figure out of clutter, being able to rotate a figure and know how it would look rotated, seeing details, being aware of differences, comparisons, and contrasts, being able to see parts of a relationship and link parts to a whole—many different perceptual skills. We're also looking at the conversion of words into pictures, pictures into words, [and the] judgment of space—basically, how you control your environment. Some people control their environment, and other people let the environment control them.

Dr. Jill 26:57

Now, a quick question; maybe you have the answer, maybe you don't. But I'm assuming a lot of [a person's] IQ [score] is [due to] visual perception. There are a lot of things to do with the visual perception that affect our ability to think, process [information], and solve problems. If someone came to see you at Mind-Eye and they had the glasses and they changed the peripheral, could it change IQ?

Deborah Zelinsky, O.D. 27:20

It has. We've had patients who have had 30-point shifts. We've had people with 90s who have gone up to 120. I've had that once with a girl. And then we've had many that were 15–20-point differences. That's a full standard deviation. So yes. They say intelligence and visualization are connected. The better you can visualize, the more intelligent you are.

Dr. Jill 27:47

That makes so much sense. And that's part of that creativity too, so I'm assuming that would all connect. I want to share [information] about the award and the future of optometry with your video. But before we do, you shared lots of stories in the first video of people who had success. Do you have one or two stories or instances where you really saw this... I mean, you see this every day—you get to see miracles every day. But do you want to share with us one or two patient stories, very generally, about how the glasses impacted their lives?

Deborah Zelinsky, O.D. 28:17

Oh, we have so many.

Dr. Jill 28:19

I know, right?

Deborah Zelinsky, O.D. 28:21

The most fun for me to watch is little children. I had a child once—I was doing a screening at a school—[and] she had her eyes closed. She was trying to reach for the bell, and I was putting different things in front of her eyes, [but] she couldn't do it. I remember her looking at me and saying, "That's so hard! Can anybody do that?!" Then I put a particular color in front of her that filtered out some light, and she was [like] boom, boom, boom, boom, touching the bell easily. You should have seen the smile on her face from ear to ear. She just said, "Wow, these glasses make me so smart!" Those types of things are just heartwarming to see. We do see that type of stuff every day, but when you hear it from a young child, it's just natural. We had another little boy who was going to be given special education classes. They had come here on a weekend, and we did something with them. He went back to school toward [the end of] the Thanksgiving vacation. They had a Christmas break, so [in] November he was not reading at a kindergarten level. Then he went back to school, like after the Christmas holidays, [and] he was reading above a second-grade level.

He jumped up to like three years of work within a month period. Everybody was [like], "What happened to him?" and it was [that] I connected his eyes and ears, and all of a sudden reading just made sense, and he went into the gifted class. His entire trajectory of life changed because he would have been down the special education path, but with an intervention, he went through a gifted path.

Dr. Jill 30:05

How amazing that you can really turn on parts of the brain that maybe weren't functioning before through the retina. This is just fascinating to me, and kudos to you. Share with us now—we talked at the beginning about this, and I can't wait to share it with people—[about how] the White House has taken notice. They also want to start with some screenings. I don't know if you want to share the video and then talk a little bit about what's happening or talk first, but either way. Tell me a little bit about what the future [holds] here and what recognition this work is getting.

Deborah Zelinsky, O.D. 30:33

Actually, I've been working with the Society for Brain Mapping and Therapeutics for many years now—for probably 12 [or] 13 years. The Society for Brain Mapping Therapeutics is being led by a Dr. Babak Kateb, and he has been lobbying with the White House for 13 years now. After that, they finally took notice, and I was invited with him and four other people to represent the central nervous system. Since the retina is a piece of your central nervous system, that's my part. And then we went with a brain surgeon who works on brain tumors. We went with a spinal cord surgeon who works on spinal injuries and a psychiatrist who works on mental health problems—all of which are on the rise. The White House was really interested in this—to create a brain center—because the current way at NIH, they don't have the interaction between things. I went to the NIH, saying, "Can I do some research?" They said, "Okay, you're an eye doctor. Go to the National Eye Institute." The Eye Institute said, "No, you're working with sounds. You need to go to the ear place." I went to the Deaf-[Hearing] Communication Centre and they said, "No, you're working with brain function. Go to the brain place." And the brain [place] said, "No, you're an eye doctor." I was given the runaround, whereas the Society for Brain Mapping and Therapeutics is putting everything together under one umbrella where there's integration among people. So, the White House is interested in it.

Dr. Jill 32:07

I was just going to say that it's so parallel to functional medicine because we're rheumatologists, gastroenterologists, [etc.] In functional medicine, we're focused

on] root cause, and we're looking at all these [things] together. You're doing [something] parallel there. In our complex world, when we need complex answers, we have to integrate, just like what you're saying. I didn't mean to interrupt you, but I want to share that—that's so important at all levels for medicine. [It's something] that we need to be doing because if we're not thinking about systems versus just one silo, we're not going to get solutions.

Deborah Zelinsky, O.D. 32:34

That's what this is. I agree with you—it's all systems. The brain is processing everything concurrently but at different speeds. They say it's independent yet interdependent. I was lucky enough to go to the White House, and they liked what we had to say. Now we're going to be going to the Pentagon in December, and then in February we have the Brain Mapping and Therapeutics annual convention, and I'm going to be inducted as their president. I have one year to take my vision of optometry and create the future of optometry amongst scientists that are like-minded. The legacy that I want to have is for people to realize that eyeglasses are not just to make you see; they're to make your brain function differently. The way I see the long-distance future, eventually, people will be coming to optometrists to regulate blood sugar, regulate thyroid function, regulate heart rate, and all kinds of things. That's not there yet, but the connections are there. There are so many patients that have these offshoots and side effects where they come back and say, "My thyroid is normal now." None of the optometrists, including myself, have yet done enough research to know what's happening. But just a year ago, they found a new retinal cell, and nobody knows what it's for—it runs the complete thickness of the retina. It's too tiny to have been seen by microscopes; they could only see it on a nanoscope, and nobody knows what it's there for. So, it's got to be something. The next 40 years of my research...

Dr. Jill 34:13

Yes, exactly. What a great position for you to have. You have my word if there's any way that I can support you. I love the work you're doing. Share with us the video that you were going to show us.

Deborah Zelinsky, O.D. 34:26

Okay. Sure. This is new.

Video 34:32

[Deirdre]: Your next visit to the doctor could include screenings of your physical and mental health. The screening would look for signs of anxiety or

depression before referring you to the next steps with a specialist. KCR3's Amy Lou is live in our Washington newsroom now. And the screenings would be for both adults and kids. Amy.

[Amy Lou]: That's exactly right, Deirdre. New guidance recommends anxiety and depression screenings for kids. And right now, doctors are considering expanding that for adults as well, in response to a rising need in mental health care.

[Dr. Gbenga Ogedegbe]: Most preventive services would occur in the primary care setting. So, I think it's really important to have that established trust.

[Amy Lou]: As a physician and researcher, Dr. Gbenga Ogedegbe wants to look beyond just blood pressure and vital signs during your appointment. For the first time, he and the U.S Preventive Services Task Force are considering checking mental health as well.

[Dr. Gbenga Ogedegbe]: The COVID pandemic has actually taken a toll on the mental health of the population, particularly among children and adults.

[Amy Lou]: Doctors say screenings could help identify more cases of anxiety and depression in some kids and adults who may not have noticeable symptoms.

[Dr. Saul Levin]: Mental health has always been seen as 'oh!'—it's something I have to be scared about. And they now realize it's not—it's treatable.

[Amy Lou]: The screenings are based on a mix of written questions and others asked by your doctor. Your answers could lead to a specialist referral, diagnosis, and treatment.

[Dr. Saul Levin]: Anxiety is just another illness, just like if you have high blood pressure. Get help. Get it diagnosed, and get help.

[Amy Lou]: And while the screenings for kids [ages] 8 to 18 are final, doctors right now are going to start reviewing feedback today on whether to expand that guidance for adults up to the age of 65. Deirdre.

[Deirdre]: So, what else do they actually look for when they're doing these screenings for mental health?

[Amy Lou]: Well, the guidance actually mentions screening for suicidal risk, which doctors say is a leading cause of death for adults as well as kids. But right now, there just isn't enough research on whether screening people who do not present any signs or symptoms actually prevents suicide. So right now, the task force is suggesting that there needs to be more research on this topic. And they're suggesting to doctors to use their best judgment on a case-by-case basis. Deirdre.

[Deirdre]: All right. Thank you, Amy, [we] appreciate it.

Deborah Zelinsky, O.D. 36:57

There you go.

Dr. Jill 36:59

And then you had a study. I wanted you to share that too...

Deborah Zelinsky, O.D. 37:01

Okay. Sorry.

Dr. Jill 37:04

... because I think that's where I think this is going.

Deborah Zelinsky, O.D. 37:14

There, this one. This was published in the Journal of Alzheimer's Disease in 2022, so it's brand new. We already proposed brain, spine, and mental health screening for health care systems. This is through the Society for Brain Mapping Therapeutics. You can find it under worldbrainmapping.org. I'm one of the many authors. The person here above me, Aaron Filler, is one of the people who invented the DTI machines to analyze brain function, so there are a lot of offers. Deepak Chopra is dealing with things [related to] meditation. [I'll] get out of this here. But the mental health screening that we're proposing, this is part of what the White House is wanting to back because mental health issues, especially after COVID, are on the

rise, brain tumors are on the rise, opioid addictions are on the rise—there are so many things. And then the veterans need things. Those are President Biden's four main issues. Our organization is trying to work with that.

Dr. Jill 38:24

I love that because you bring such a unique and really holistic solution. Not that we don't have drugs for a purpose; no problem with that. But how cool would it be if we could change the brain through eyeglasses, which we know is true? I love that you're going to be the president of the Brain Mapping Society. I can't wait to hear—we're going to have to have you back next year so you can tell us what all happened in the year. Any last bits of wisdom? First of all, where can people find you? Let's start there.

Deborah Zelinsky, O.D. 38:53

Mindeye.com.

Dr. Jill 38:55

Perfect. And you're in Chicago, in the suburbs, right?

Deborah Zelinsky, O.D. 38:58

Yes.

Dr. Jill 38:59

Perfect. And you're training doctors too. I know you have a colleague. Are you planning to have more doctors or optometrists in your clinic?

Deborah Zelinsky, O.D. 39:08

We are. We're expanding. We'll be building two extra examination rooms, and we have one optometrist who just started about a month ago. We're looking for a second optometrist now to have the other new exam room. Currently, Dr. Adams and I are the two main optometrists here. We'll have four optometrists soon, and we're hoping to keep growing and going worldwide. Eventually, we'd like to have Mind-Eye clinics everywhere.

Dr. Jill 39:36

Oh, I would love to hear that; it's amazing. Thank you for your groundbreaking and brilliant work, Dr. Zelinsky. We owe so much to you. I can't wait to see what the next several years hold as you train more doctors and more people to do this. And thanks for your time today. I am incredibly grateful.

Deborah Zelinsky, O.D. 39:53

Thank you so much, Jill.