

BigBrain Radio Show  
8/4/2007  
Adam Klotzek

(music)

DS: Hey, good morning! It's Saturday morning! It's time for the BigBrain Radio Show. I'm Dr. David Stussy, and you can call me Dr. D... and... we're having a great... you know, I just love doing the BigBrain Radio Show. I just love it. I'm so excited to be able to come back on Saturday and do that. So, we have another...

AK: So am I.

DS: ... We've got another voice over here. Who's this voice?

AK: This is Dr. Klotzek...

DS: We have back... we have back with us, Dr. Adam Klotzek, a world-known neurologist who actually is a partner of mine in the clinic that we have. And we had him... what was it? Three weeks ago maybe? About three weeks ago?

AK: About three weeks ago.

DS: So anyway, we had so much positive response... we had patients... people that came in... and people that called, and we

referred a lot of people... so we thought we'd do it again and see if he can... if it's really true. Maybe you're kind of a natural superstar.

AK: I don't know about that. (laughter)

DS: Well, he's definitely a BigBrain. And for those...

AK: Definitely a BigBrain. That's right.

DS: ... of you don't listen to the BigBrain Radio Show, you know the BigBrain Radio Show talks about the BigBrain in all of us. Now we have a physical brain and that physical brain is constantly taking care of us... 99.9% of what goes on we're not even aware of. But it takes us... we take it... sometimes we take it for granted, except when we're injured and things don't work for us then we get a question mark. And so that affects our physical abilities. And of course, as Dr. Klotzek and I... as chiropractic neurologists we take care of a lot of things where people aren't working so good.

AK: Absolutely right.

DS: And the brain has a lot to do with that. And then we have our metaphysical brain, which our brain... part of our brain some people call it the mind... People have all kinds of names for it... the third eye... But it's the part of the brain that integrates all the information and all the experiences and all our genetics together and comes up with our original ideas and our language, and our culture, and the

things that we find interesting, the things that we excel at. And it puts things together in a very unique way. And we are all unique. 60% of us is hardwired, but 40% of our brain is totally unique. Your brain is like no other brain that's ever been or ever will be because of who you are. And that's what we like to celebrate... is the BigBrain in all of us. So... the BigBrain Radio Show we're going to talk about BigBrain neurology. Right?

AK: You got it. Yeah.

DS: We're actually...

AK: I'm excited.

DS: You know, um, when I started practicing I started practicing in a little town in southern Minnesota... a town... I think it had 600 people in it.

AK: Mm hmm.

DS: And, um, of course you see a lot of people from all over the counties, but ... it was near Rochester and um... so I had a lot of patients that would be going to the Mayo Clinic and they would be going...

AK: Mm hmm.

DS: ... come and see me also because I was kind of like a doctor. Even my father was raised near there, drove 100 miles so he could always go to the Mayo Clinic. And my mother two.

AK: Mm hmm.

DS: So, it just kind of became habitual. So, ah... because it kind of created a direction that I would take in my life and I think BigBrains always experience that... is the moment that you can take and have it... that it makes a direction. And even meeting BigBrains do it to us. Somebody spends a half an hour giving us a talk and we're inspired forever...

AK: Yeah...

DS: I think you ...

AK: ... You seem to attract those people in your life.

DS: Yeah... yeah... And we attract them, but you know what?

AK: Yeah.

DS: You have to be paying attention for them.

AK: You do.

DS:           And so one of the BigBrain concepts of our metaphysical brain is what you pay attention to, is what you're able to create an intention on. And you have to have both of them. You can't just say, "Hey, I like to do that". You actually have to have some action. So, a thought plus a feeling... you know the feeling that it's going to be different for you... creates a motor action.

AK:           Mm hmm.

DS:           And that's how lives are created. And the more we do that, the more life ... and even when something comes at that doesn't look like it's going to serve us, it does. So anyway, back to my little story. I had... I took... I had a lot of chronic farmers and people like that coming in, but I all noticed that... just about anybody that had severe chronic pain had been related... had been in a motor vehicle accident within the last two or three years. (noise) And... um... I think somebody's phone went off there, huh?

AK:           I think so.

DS:           We're not going to answer it this time, though. (laughter)

AK:           (laughter)

DS:           Anyway... ah... So I noticed that most of them had car accidents. Either they weren't treated... and this was a number of

years back so they didn't have seatbelts, they had hard dashes... and people were tough. (laughter)

AK: I remember... (laughter)

DS: (laughter) Anyway...

AK: ... seatbelts... what was that?

DS: The kids stood up and rode in the front seat.

AK: (laughter)

DS: (laughter) ... wouldn't they?

AK: (laughter) Almost fell out the window too.

DS: (laughter) Oh, you did!

AK: Almost!

DS: (laughter)

AK: But my dad had good reflexes. He grabbed my by the shoulder and pulled me in.

DS: That was probably one of those injuries that didn't get treated!

AK: Exactly.

DS: (laughter) So anyway, I just noticed that so I started studying motor vehicle injuries and the trauma... and of course at that time there wasn't a lot. But it actually created a direction. And then I had another experience. I call it the "Dale Buck" story. A friend of my grandfather's who lived near there had a bad... had a car accident and he was just feeling terrible. And the thing is... when he came in... this is a big, strapping guy. He ran a bar/restaurant that was like a local night club. I mean it ... it wasn't just... he wasn't... he was a pretty functional guy.

AK: So this is a guy you wouldn't think that would have got hurt.

DS: Yeah. And he was having all this pain. And he was always... like... he had all these symptoms going on. In fact, his relationship with his wife... all kinds of stuff. That was the thing that confuses... and you probably even share that one... when doctors...

AK: Yeah.

DS: ...get this plethora of symptoms associated with motor vehicle accidents.

AK: Yeah and you don't really know...

DS:           When you injure the neck. And as chiropractors we kind of knew, intuitively, how it was related. But, you know, documenting it... So, there's a lot of time that's passed since then so we can actually document that relationship.

AK:           And we understand.

DS:           But at that time you couldn't. Well, I had to go to court on this and... little local, country, county court house and the person testifying for the insurance company was from the Mayo Clinic.

AK:           Okay.

DS:           So I came in and I testified and... this was 1970...late '70s, okay? (laughter) And...

AK:           I was just getting started back in those days.

DS:           (laughter) Anyway, they had offered him something like \$15,000 before the trial, which was a lot of money...

AK:           Back in those days, yeah.

DS:           It really had affected his business, so... and so after I testified they got \$50,000.

AK:           Wow!

DS: And they...

AK: That's incredible. That's awesome.

DS: The...everybody was so upset that it went all the way to the Supreme Court...

AK: Wow.

DS: ... and they testified that it... a doctor of chiropractic could testify just the same as a medical doctor from the Mayo Clinic. So... I got kind of hooked on motor vehicle accidents then.

AK: What allowed you to do that? What was it about what you knew?...

DS: Well you know that I'm kind of a... I'm kind of like you. I'm not quite as nerdy as you... but... (laughter)

AK: (laughter) Yeah, I'm a little bit on the nerdy side.

DS: (laughter) I have my tendencies. Anyway, I have studied quite a bit and I have some... very interesting... we developed this ... on the whole spine gets torn and twisted.

AK: Mm hmm.

DS:           And I demonstrated that... and then I demonstrated x-rays that showed that. And basically it really... they didn't really say much on the other side that was of any value. So all I did was create value, I guess.

AK:           Do you think one of the biggest problems is that people and clinicians treating whiplash don't really understand what happens in a whiplash injury?

DS:           Well, you have to understand... that most of what people think of whiplash injuries has to do with propaganda from the insurance companies. Okay? All right?

AK:           Okay.

DS:           And um... and... or defense attorneys but they keep repeating and repeating it, so by... even at that time, you know the "whiplash"...

AK:           Mm hmm.

DS:           ... they couldn't even explain... but all of a sudden people had a problem. But the thing is, people would consistently have the problems and consistently have the same problems. And it didn't matter whether they were big, small, little or whatever...

AK: Mm hmm.

DS: They would have them. Okay?

AK: Right.

DS: So it wasn't like it was being made up. But in order to substantiate it, you had to kind of show clinical findings...

AK: Right.

DS: ... and it's been going like that... But most of ... most of what people know about whiplash and injuries is either not correct, not ... not been repeated accurately, or it's been just something ... sort of like a thing that just keeps getting said so people believe it, or they're just downright lies. And there's some of that also.

AK: Mm hmm.

DS: And of course... and I'm not saying like against insurance companies because they have their job... that's what they would do. But I just don't think the... the ability to... the people that suffer are the ones that get hurt. Okay?

AK: And there seems to be a lot of misconceptions as to what happens.

DS:            Yeah. The ones that... the ones that get...because it takes all the literature... top literature... there's tons of it. There's probably... I could have a stack three piles high up to my head here, about positive things ... kind of... talk about studies and I could have a stack this thick that are... that are negative about whiplash...

AK:            Right.

DS:            But these are the ones that keep just saying...

AK:            That keep throwing in there and keep using and using.

DS:            And as I started to say, it's really the human... the human person... the individual that's injured that gets altered because it immediately changes their ability to function. There's pain, but there's also kind a lack of a lot of things that they're used to having. Energy...

AK:            Well and you...

DS:            ...focus and they... it destroys their social life. It can upset their work patterns... their relationship to their kids... their ability to do hobbies... just the general quality of their life. And the literature clearly states it takes about a year to two years to get better. Some people six months, but not much faster. Okay? So people get under-treated, etc.

AK: And at the beginning of the show you mentioned a very interesting point that 60% of our nervous system is hard-wired...

DS: Very good.

AK: ... and the other 40% of it is as a result of our environmental experiences... life experiences and how we grew up and that. And I think that's important because when two people are involved in a car accident that are both in the same car, they may have totally different symptoms because of that... because they're different.

DS: Right.

AK: They're different people.

DS: You're right.

AK: Yeah.

DS: The number of injuries they had...

AK: Yeah.

DS: ... if they're sensitive... and sensitive is a genetic trait. It isn't something because they've got like sensitive personality.

AK: Mm hmm.

DS: They're just sensitive to change. And they... they'll heal differently. Everybody heals differently. That's why saying that everybody should have this and this and this isn't true... because everybody's so totally different. Okay? So you asked me that question, why did I testify? I started at that time developing a contextual degree of information about what a whiplash did... and it went up through my spinal distress stuff that I did with x-rays and stuff that we helped develop with Dr. Longbeach. And then I started to get into the neurology with a good friend, teacher of ours, Dan Murphy...

AK: Uh huh.

DS: ...which then led to my going to the Carrick seminars, which you taught...

AK: (laughter)

DS: And now we're in the brain. And then we're looking at the whole component of all the soft tissue in the body being a living matrix, so any damage to the body affects the whole body.

AK: Yeah, that's a fascinating concept...

DS: Yeah. And so we're not just stopping there. We're going to continue to develop that. And ... the truth is, it's an energy injury and

it's energy treatment. And so people need to get it back and so there's lots of things on the horizon that we'll be creating that will make it even faster. Okay?

AK: Now isn't it true...

DS: We do some really cool things now, which we're going to show you guys today. Okay?

AK: Yes.

DS: So... you know we love doing the BigBrain Radio Show. We like having BigBrains on like you, Dr. Klotzek, so thank you for taking the time to do that. Of course, I told you you had to come.

AK: I appreciate being here all the time.

DS: You're going to be flying... you're going to be flying off pretty soon.

AK: Yeah, I'm off to Atlanta again this weekend.

DS: And then London in about another month.

AK: Yes.

DS:            So this guy's in demand. So we're lucky to have him on the BigBrain Radio Show. We'll be right back.

(music)

(music)

DS:            Hey, welcome back to the BigBrain Radio Show. This is Dr. David Stussy, and I'm here with Dr. Adam Klotzek and we are talking about BigBrain ideas, especially the nervous system, the brain, what goes around the brain, out into the universe, and who knows where. Right?

AK:            You got it.

DS:            Actually, we'll keep it more clinical. All right?

AK:            Yeah, I think so. (laughter)

DS:            Okay. I guess I was told that the... I'm not quite talking in my microphone, so I'm going to try and do a little better here. I get so excited I kind of move around a bit. So anyway, we'd kind of gone through how I had kind of realized that this thing called whiplash or car accidents created a lot of health problems for people that weren't being treated and that we needed to go about creating a context to evaluate it that really worked.

AK: Mm hmm.

DS: And ah... and we talked about how we have done that. That's the thing that we're known for. We lecture around the world on it.

AK: Mm hmm.

DS: And ah... but let's go back and just kind of do... kind of put the pieces together for people to understand. So when a person's in a car accident you know you think that well it depends on how much damage to the car. Well actually, it's the rebound effect. So if you hit like a little ball on a pool table, you know if you hit it right "boom", another one shoots off. Right?

AK: Right.

DS: And that shooting off is called acceleration. And that's where the neck and the back get injured. It's the amount of how fast that acceleration is. So when the bumpers don't collapse, they actually cause more acceleration.

AK: So is it true that there's very little relationship between the damage in the car and some of the ...

DS: Hardly any.

AK: ...injuries of people?

DS: The only time damage inside the car...

AK: That's important to know.

DS: ... comes into play is if part of the car hits the person inside.  
Now that's a contact injury then.

AK: Right. Right.

DS: What we're talking about is an acceleration/deceleration where the neck is totally unsupported. And the head and the shoulders are at different fixations so ... like if you're hit from behind and the seat goes back and it springs people forward besides, just the...

AK: Mm hmm.

DS: And so the acceleration even at 4-5 mile an hour impacts, and we have videos that we show that, is quite ... more than enough to injure people. And the other thing is... like you were saying... you can have one person in that car accident that won't be hurt and the other one will because of the different components.

AK: Yeah, 'cause they're different.

DS: Yeah.

AK: Yeah.

DS: Yeah, well there's some things... Let's just hit that as long as we're on it.

AK: Mm hmm.

DS: The things that determine how well people will do in an accident has very little to do with the amount of body damage. So I just saw an article two days ago... they were quirked Lexus because Lexus car compressed. But that actually makes it better for the ... for the occupant. They have less...

AK: That's because it absorbs more energy?

DS: It absorbs the energy. Yeah.

AK: Yeah.

DS: And there's a mathematical formulas that show this exactly. And you've seen it. We've gone over it.

AK: Yeah, I've seen that one. Yeah.

DS: So anyway, so what does determine whether a person's going to get hurt? It has to do with being caught off guard.

AK: So is that the biggest one?

DS: That is big, by 500%.

AK: Wow.

DS: Yeah.

AK: 500%?

DS: Yeah, so if you're protecting yourself a little bit, it goes down proportionately. All right?

AK: Okay.

DS: And again, there's a bell curve on that... who gets affected.

AK: Mm hmm.

DS: The other is if you had your body twisted in an unusual position.

AK: Mm hmm.

DS: Um... you know you might have been twisting... putting your arm down. I've had people who were bending forward...

AK: Mm hmm.

DS: ...picking something up so their head went straight into the dashboard and stuff like that.

AK: Wow.

DS: I mean, that would make a difference.

AK: Mm hmm.

DS: Whether they get hit by you know the airbag, the seat comes loose...

AK: Mm hmm.

DS: Another thing is females are twice as more likely as men because they don't have as strong a neck. Okay?

AK: Okay.

DS: And I'm not saying anything about women because women are very strong, but as a rule, genetically in the way... in our particular specie development, they just have the smaller neck muscles... even though people are bigger, they just aren't as strong.

AK: Does it matter which way their head is turned if they get hit?

DS:            Yeah, if they have their head turned, it's going to make a huge difference. Like people are usually talking to somebody or they're looking in the mirror... or else they see the thing coming and they're looking up in the mirror. You know?

AK:            Yeah.

DS:            So all those things... and so...

AK:            So all that has to be documented and that's going to make a difference...

DS:            And if a person's been in accident before, they're more likely to have more problems. Right? And sometimes they try to blame it on the old accident when it isn't, because they're complete symptom-free, but they still have some weaknesses in there.

AK:            Right.

DS:            So... and then from the side they're more likely to have like a low-back problem, or mid-back and from the back more neck and head. But they'll be injured in both because the spine is all one synchronous unit... like... well we have this thing called a Schiff's Curve, and that shows how the spine is synchronous, so the neck goes back and the rest of the spine goes forward and gets...

AK: Right.

DS: ... twisting, the spine gets twisted. So the biggest thing is the tearing.

AK: So, that explains...

DS: Yeah...

AK: ... that explains how someone maybe ... might hurt their neck, but all of a sudden start developing low-back pain, or mid-back pain...

DS: Yeah, for a couple reasons. The back gets a lot of torsion and stress... on impact the neck stretches out, the head stays the same and the neck kind of buckles underneath the head.

AK: Mm hmm.

DS: It's called an "S" curve. And there's actually tearing in the cord at 7-8 miles an hour.

AK: That's significant.

DS: So we use the word "tearing" and it's the... it's the very little muscles and tissues that get damaged.

AK: Mm hmm.

DS: And so when people have all that tension, like in their neck and their back from an accident, they think that's the injury. No, those are the muscles that are just working double-hard now.

AK: Right.

DS: Because everything else is injured and inflamed inside and those muscles tend to be weak on people, as you know.

AK; Right.

DS: And I think they're called intrinsic. You want to tell us a little bit why they're so important?

AK: Well the intrinsic spinal muscles are extremely important because they are the ones that stabilize your spine. And they're the smallest muscles and because they're the smallest they're the most easily to get hurt.

DS: Right.

AK: And one thing about those intrinsic is that we can't move them on our own. We can't think about actually moving them and they are actually controlled by an area of your brain called your cerebellum. And because we can't control them, the only way that we can usually

rehab them and make them stronger is by changing the activity in the spine, doing exercises, chiropractic adjustments and incorporate...

DS: So they can't...

AK: ... the whole process.

DS: They're not just going to get better.

AK: Yeah, they're just not going to get better.

DS: You know the other thing is, they're always working; they hold us up. So they're always actually moderately contracting.

AK: Always acting, yeah.

DS: Yeah, so they have different fibers than say our other muscles.

AK: Mm hmm.

DS: And so... um... and they take a lot of energy... high aerobic, aerobic, demanding muscles. And so when they fatigue, it's hard to get them better. So one interesting thing that we've started to do is we started doing this brain...

AK: Brain-based rehab.

DS: Rehab, right... where we start getting those... right from the get-go we start getting those little muscles to work.

AK: Yeah, we have specific exercises that are geared specifically to target those muscles... and to help rehab them ... and that should start in the very beginning stages.

DS: You know here's a cool little fact... this is so cool and you taught me this... is that the little muscles that hold part of the spine called the multifidus and the inter transversari... I'm going to quiz you guys on that later...

AK: (laughter)

DS: And then ... but the same muscles that make our eyes go from right to left and left to right or sideways motion, develop in the same embryological tissues as those muscles in the spine.

AK: Yes they do.

DS: They are connected forever.

AK: Yes. And that becomes really important because a lot of people who are involved in those types of accidents and damage their neck, some of the symptoms they experience are dizziness, they may get double vision, and the reason they're getting that is because the injury to those neck muscles changes the way the eyes move.

DS:           You got it.

AK:           And that's one thing that we really focus on is looking at those eye movements.

DS:           Funny, a lot of people don't know that their eyes are very important keeping us balanced and stuff. In fact, Dr. Klotzek and I feel a lot of people start losing their balance in their teens, but we have such good physiological reactions it's just hardly noticeable. And then our eyes... well then people get into their 50s, they start having falling... it's really because the visual cues aren't as good any more. But it starts back with injuries like that.

AK:           Yeah, injuries like that, and just through aging... but not as much so. But those injuries tend to make it age really, really quickly.

DS:           Yeah, we talked about dizziness in our last show and we had a lady that came in because of that.

AK:           Yeah, she came in.

DS:           So there's lots of different causes of dizziness. And the biggest thing is a lot of people are told it's not treatable. And there are treatments available. In fact, we should just make a point. You know I said that I started a long time ago putting together contextual information, scientific information about why motor vehicle accidents

hurt and why the type of care we do is going to help them. The information that's still present within much of the medical community is archaic and outdated and doesn't even come close to matching up with the amount of information that's available, which is kind of the problem. I mean...

AK:           You've been a pioneer in that. Quite a pioneer in developing those things.

DS:           Well I mean... I'm taking this information that all these other people are writing about. You've got... who are just doing it for all kinds of reasons, but it ends up being information we need. So... What we've basically said is there's a damage in the spine, damage in the soft-tissue and the soft tissue is what holds everything together. And we should talk about that whole concept of soft tissue when we come back, because there's something interesting on that.

AK:           Definitely.

DS:           So, we're going to keep looking at this and going... and hopefully we can give some information that's going to make a difference, because the only reason we do this is to make a difference in people's lives. So you notice I have a little fun kind of music... a little energy, because it's energy treatments okay?

AK:           Yep.

DS: So a little more energy music. Dr. David Stussy, BigBrain Radio Show.

(music)

(music)

DS: Hey, Dr. David Stussy... the BigBrain Radio Show. We're liking this song, we thought we'd play it just a little bit more.

(music)

DS: Hey, okay. Dr. David Stussy BigBrain Radio Show... we've got Dr. Adam Klotzek. He likes this music. He plays the guitar. He's a BigBrain genius. Okay? When I first met him, he was traveling with his guitar.

AK: Oh, I would take that thing everywhere.

DS: You were disciplined.

AK: You know though I never... I used to play in the airport, but no one would ever throw me any quarters.

DS: At least they didn't throw tomatoes.

AK: (laughter) Exactly.

DS:           When we're talking about stuff like this, we're talking about the quality of your life... your ability to enjoy moments and think back and have a system that works. We've been talking about people who have been in car accidents or any kind of injury... a fall that does the same thing... and how it actually changes their ability to kind of sense their environment, they don't feel as good, it's not as easy for them to be relaxed. They don't remember things...

AK:           Right.

DS:           And you know it's the constant thing that we get ... from patients... could my memory be... you know even though we go over this... and then they get pooh-pooed by other ... you know what? People come in and the guy... they will say no, that couldn't be from the accident. You know we have about 20 studies that show that.

AK:           Right. And that's when...

DS:           You know what? It doesn't take a... life is really about cause and effect. And you have to be at cause with everything that happens to you. And our ability to experience life and then see that as our selves... as an expression of our life... is really important to the BigBrain concept, so the injuries stop that. And the cause and effect are so obvious... like the accident, and then this happens.

AK:           I know...

DS: It couldn't be this large of a group of people going around making up this information, okay?

AK: Absolutely. And it's sad that people go through that and they have all the stuff going on and they don't know that there's other options available to them that can improve the quality of their life.

DS: Well that's one reason... that's why we're doing this...

AK: That's why we're here. Right.

DS: Because we're always... I don't think anybody... we don't get better mostly, almost ...

AK: Yeah, yeah.

DS: ... 90, maybe 100%. Um, the other thing is that sometimes people want to say well it's psychological. Well the studies show that the psychological changes came from the injury to the neck. And what they did is these people had a lot of pain and they used a profile the same as a person with arthritis...

AK: Mm hmm.

DS: ... which is called organic, or real, pain. And so they try to say their pain isn't real. But they took these individuals. They gave them

these injections, which will take the pain out their neck for quite a while.

AK: Right.

DS: They had them do the psychology profile again and they went to normal.

AK: Wow.

DS: So it was the pain that was causing the psychological changes, not the other way around.

AK: And it affects the way your brain works. Absolutely...

DS: Oh people in a lot of pain will tell you that the...

AK: ... you know changes chemical...

DS: Paint automatically changes your brain function. It changes your... well, it even changes your own self-image.

AK: Yeah.

DS: You start seeing yourself as limited, instead of expressive. And, there's all kinds of damage. So you know I want to go back to the soft tissue idea because sometimes what they'll say is it's just soft

tissue. Well folks, the only part of the body that isn't soft tissue is the bones. So everything in the body is soft tissue.

AK: Everything is soft tissue.

DS: If it was your heart would you say it was just soft tissue? And also the brain sits inside your skull like a bowl of Jell-O.

AK: Yeah.

DS: Shake a bowl of Jell-O and see what happens. So just anybody who's had any kind of reasonable ... like over 4-5 miles an hour ... has got some ... some tearing in the brain on the lining.

AK: And I think that's going to ... that's going to be the next big thing. I think that as the research comes together I think people are going to realize more the damage that happens to the brain... not only the soft tissue but the brain itself gets damaged...

DS: Well...

AK: ... in these accidents.

DS: We have to go back. The soft tissue is going to heal, it's going to form scar tissue...

AK: Mm hmm.

DS: ... which is called fibrosis. And then... but those fibrotic tissues have created new pain centers... what's called territorial ... your body develops new pain sensors so we know those are there.

AK: Right.

DS: And they get easily aggravated. So if those aren't corrected, that's what takes the time to get that fixed...

AK: Mm hmm.

DS: And then those things also... movement in the spine is what drives the brain, but with the scar tissue it doesn't move as well so the brain doesn't get stimulated.

AK: Brain doesn't get as much stimulation.

DS: So you see I was ...

AK: Yeah.

DS: And that's without even getting to the fact that sometimes the brainstem, which we'll talk about in a little bit...

AK: Gets ...

DS: So the soft tissue part of the damage, when you get an adjustment that puts motion or energy into the muscles. There are other techniques that we use. And they're always stiff and more sore. So we can get rid of those pain receptors, but you still have that chronic tissue problem in there...

AK: Which can be a source of pain for the person...

DS: Right.

AK: ...ongoing.

DS: People notice weather changes... almost all kinds of stuff.

AK: Mm hmm.

DS: But the more you treat it, and the more intensely you treat it, the more likely you are to have it not be a problem for the rest of your life.

AK: And then you know people think that you know it's going to heal on its own and it's going to get better on its own. And that's probably not the best way to go about treating something like that.

DS: It will heal on its own, but it will heal weaker, stiffer and more sore.

AK: Right. And one thing about pain that I found really, really fascinating is the following: That when you are in pain for a long period of time... and maybe a long period of time might be a week or two weeks, the actual pain nerves rewire themselves in the spinal cord, so it makes them more reinforced, it makes them more sensitive to pain stimulation. So that's why it actually becomes a problem because after a long period of time that that happens is that people experience pain for, oh, years after an accident and they don't know why. And a lot of it has to do with some of the rewiring issues that have happened...

DS: Right.

AK: ... in the spinal cord and in the brain itself.

DS: Well remember those studies I showed you. There's been a number of long-term studies, one's up to 12 years where people have... 80% of the people still have symptoms.

AK: Yeah, 12 years.

DS: Now these are people who I don't think were treated with chiropractic care because... in opposition there's two great researchers with car accidents. They're called Gargan and Banister and they're from United Kingdom. And they're orthopedics and they're like big dogs in these journals.

AK: Mm hmm.

DS: Well, they started a study with this chiropractor, just a regular chiropractor in England, and their conclusions... they too 100 people and another group of 30... all of them got better after they had already said they had permanent injuries and permanent pain. So these two orthopedists wrote a journal ... wrote a couple articles that said the only effective treatment for chronic whiplash pain is chiropractic care. They'd had physical therapy. They did everything.

AK: Maybe we should talk about how ... to alert to the listeners... how the chiropractic adjustment would actually help that. I think that might be good.

DS: Okay. So go ahead.

AK: Well, um... one way it's going to help it is that when you adjust somebody you stimulate nerve fibers that act as a natural pain-blocking mechanism or effect.

DS: Okay.

AK: So they basically go into the spinal cord and they block the pain nerves before they can transmit that information into the brain. So when you have these injuries and the movement isn't as good, that whole process doesn't work well.

DS: And that's called a pain gate.

AK: Pain gate. Mm hmm.

DS: The gate gets opened... in fact, we told the story on here once why... John Kennedy, he had a chronic back problem. He ended up having this osteopath who does a lot of chiropractic type things prescribe swimming and a rocking chair to him and a heel lift... because that's what got his back better. And they're all motion initiated activities. In fact she was then hired as the ... what's the big ... surgeon general.

AK: Wow.

DS: First non-medical person... non-military ...

AK: So stimulating the same type of fibers...

DS: Yeah.

AK: ...that would naturally block pain.

DS: It's called motion therapy... you want to do that.

AK: So that's one of the big things that people just don't understand. So when they do damage to these joints in their neck and their spine,

they lose that input from those nerve fibers and the pain gate is opened.

DS: You got it.

AK: And then they have this chronic pain and they try all sorts of things. They try, you know, medications...

DS: You know and that's where chiropractic is the most effective...  
(inaudible)

AK: Absolutely... yeah. (inaudible)

DS: I mean people can have pain and they'll come and instantaneously they're better... much better ... sometimes incredibly better.

AK: Yeah, just after one or two treatments they're like 80% improved and they're like wow.

DS: Yeah, it's just getting it to stay that way that's really the hard part.

AK: Yeah. Uh huh.

DS: So what else does chiropractic...

AK: Well some of the other things it does too is it breaks up the adhesions... these little gluey particles...

DS: Scar tissue we're talking.

AK: The scar tissue, the adhesions... that form in the actual joints themselves and in the muscles. And that has to happen because that's part of that whole remodeling phase where the muscle goes through ... that you can talk... that you've talked about many, many times. And that... it takes a while for the muscle to actually remodel itself.

DS: Yeah, and it gets to be more... you're remodeling it getting it closer to normal tissue. Never is 100%.

AK: Mm hmm.

DS: You know there's one thing I think we forgot to tell. There's two areas of the spine that cause 90% of the pain in whiplash. One's called a facet (sp?) which most people wouldn't know... it's ... it's the little joints of your spine.

AK: In the back of the spine.

DS: Yeah, it's like a joint... like there's two hinges.

AK: Okay.

DS:           And they're full of receptors. And the other is the disc, okay?  
And we have reason... and most of them in the neck it's the vasettes  
and in the low back it's more of a disc.

AK:           Mm hmm.

DS:           But they both cause pain once they've been changed. Well  
chiropractor... those are the two structures that chiropractic care  
affect, which is what they pointed in that one article and then  
Gargan...

AK:           Mm hmm. He did as well.

DS:           No, who's the... Bagduk...

AK:           Bogduk (inaudible)

DS:           Here we're talking names you guys don't even know we're  
talking about. But anyway...

AK:           These are just other BigBrains.

DS:           Yeah.

AK:           These are other BigBrains.

DS:           We better go back to practical matters here, okay?

AK: (laughter)

DS: So what kind of things show up in accidents? Headaches...

AK: Headaches

DS: Called cervogenic headaches. Very rarely is there damage in the brain. We have all kinds of tests to rule that out.

AK: Dizziness shows up.

DS: Dizziness shows up; visual disturbances; balance.

AK: Tiredness.

DS: Tiredness. I already talked about the psychological. We already talked about the fact that it's long-term. You know people start having ... oh, numbness in their hands and fingers from the weakness in the neck.

AK: Mm hmm.

DS: They get a lot of referred pain and it's not from a nerve being pinched. There's a type of pain called sclerotoges pain when you get enough build up of that scar tissue.

AK: Right.

DS: And sometimes they call it sclerotogenes tissue.

AK: And that just means a referral...

DS: A Referral. Yeah, but you get pains... you and I both had experience, and I'm sure other doctors have had too when you push a point on their back or their neck and they can feel that exact pain some parts in their body.

AK: Yeah, like it'll shoot up into their eye or...

DS: Yeah. Sometimes you can get strange ones... like a push in the shoulder and they can feel it in their leg because of this living matrix... the way the body is all connected. So unless you have somebody who knows how to look for all that, they're just not going to get it all.

AK: And that brings up an interesting point because just even anatomy wise, the pain nerves that supply your face and supply your brain, actually make connections in the neck... before they actually go up into the brain where it's registered. So that's why a lot of people with damage to their neck... because they share the same pathway, experience face pain and headaches...

DS: So it's like...

AK: ... and the pain... yeah, it's like...

DS: Like underground where they've got electrical wires and plumbing wires and computer wires together. If something happens there they can overload and affect each other.

AK: They can damage... they get a cross talk and ...

DS: Cross-talk, yeah I like that.

AK: Yeah, they get a little cross-talk in there and then all of a sudden they're feeling headaches because of the damage to their neck.

DS: That reminds me of the old fashioned country phones. You know that...

AK: I actually remember those.

(laughter)

AK: My grandparent's place... farmers, right... so you hear all these other people talking. Even these days, sometimes on the cell phones.

DS: You know what? That's true. You do!

AK: Yeah, you do sometimes. That's called cross-talk.

DS: Cross-talk. Waves in the air.

AK: Yeah. Mm hmm.

DS: So, now we've talked about the spine and I think people can understand neck pain and the back pain and stuff, and the nerves that come out of the middle of the back go to the organs and so people get upset stomachs and all kinds of things like that. But when you get to the very top of the spine ... you know we talked about the cerebellum, which is... if you put your fingers on the back of your head on those little bumps, that's kind of where the cerebellum is...

AK: Mm hmm.

DS: And that takes all this information... of the damage and how your body is working. There's another part called the brain stem, which really isn't the brain, it's the connection between the brain and the brainstem... the spinal cord. So tell us a little bit about that because this is something I think you're an expert in... how we kind of look at it in the eyes and our balance and stuff.

AK: Well the brainstem is really important because it has a whole bunch of centers in there that control almost everything. So they control your heart, they control the balance, they control eye movements, and everything along those lines. But important... they also have a lot of centers in there that control pain.

DS: Right. That's right.

AK: And when there's damage... when there's damage to the brain center, not the brain center but the actual brainstem, you can damage those pathways that normally dampen pain. And what we do is we analyze those pathways by looking at the eye movements, looking at posture, because those areas are right next door to those areas that control pain. So we can gauge some of the damage by looking at how someone's eye move, how their head is positioned, and...

DS: You know these are standard tests. It's just that we've had the ability...

AK: To interpret them differently.

DS: ... by taking them ... interpreting it in terms of clinical. The tendencies in pathological medicine, that's the way it should be. There's a gray and a black. It's either pathological or it's not.

AK: Mm hmm.

DS: But there's a whole broad area in between, which are called subclinical, which by using that information you can create changes in other parts of the body. Right?

AK: Yes. Yes. And I think we see this because in some of the medical treatments in pain, they may give somebody an antidepressant, which changes the chemical balance in their brain and all of sudden they don't feel the pain as much. Well that's probably not the best approach long-term because you really have to find out why that chemical imbalance is happening. And if it's happening because there's loss of information coming in from the neck, then the obvious thing would be to fix that and so the information gets to where it needs to get to and stimulates the nerves on a more natural pace to cause that same effect.

DS: You know and that was... I talked about Dale Buck... you know a number of years ago.

AK: Right.

DS: Well that was one of the problems. He didn't have... he was actually a really friendly guy, he was semi-depressed...

AK: Mm hmm.

DS: It was causing problems with his physical relationship with his wife and all of that stuff. Well I just kind of intuitively explained it to him and I got to work and I was able to improve all those just by kind of focusing on it.

AK: Mm hmm.

DS: But I couldn't really explain it like we can today. But it made a huge difference; changed his life. You know quality of life is what... you know in fact one of the ways insurance companies evaluate when they do settle on a case is the quality of life... how badly it's been altered.

AK: Mm hmm. And I remember a patient I had. This was way up when I was doing some consulting work. And this lady had come in, she had some... injuries... she got hit over the head with a frying pan or something like that. But I'm examining her and it's snowing out and she just... she just can't look at the snow. It's just freaking her out. She's getting this big rash over her neck and everything...

DS: So what happened?

AK: What ended up happening is she had some damage done to her brainstem, into her balancing centers because of the injury. We did some treatments, we did some adjustments and we did some brain-based rehab... sort of what we're doing now in the office... here in Kenwood. And within a couple minutes she's like looking at the snow. She was like, "It doesn't bother me now." And it was life changing for her, because she couldn't even sit in the car or anything along those lines... because any movement of the world around her would bother her. So that's the amazing stuff that happens...

DS: See a miracle is just the application of known principles. So things can look like a miracle or they can't believe it, or it's too good to be true, but we have pain disappear on patients that have had it for...

AK: Yeah. We've all had that...

DS: Like yesterday I told... that guy I did the acupuncture on and the tissues weren't that sore so I said it had to be... he's a big hunking guy too. It had to be his brain. I put some of these red glasses on and he could move his neck immediately. There were four other people standing there.

AK: Mm hmm.

DS: And you know this is something I learned from you, in fact, that the brain needs light to stimulate us, but if it's too much – like it was with this lady - ...

AK: It actually causes ...

DS: Yeah, so you have to filter that out. And that just let his brain have enough energy so his neck didn't hurt as much.

AK: Mm hmm.

DS:           And you know... so if you see guys with these glasses out in the waiting room, or you see them...

AK:           (laughter)

DS:           They're actually in demand. People have come up and want to know where they want to know where they got these glasses. Okay? I'll put these on now so I can be... A lot of patients I have use this to relax. They feel relaxed because it filters out all the red light that go to the brain, let the brain relax.

AK:           Right, and it changes the way the brain works.

DS:           Yeah, so we have all kinds of interesting... and we've been getting some very... since, you know how the law of attraction...

AK:           Mm hmm.

DS:           ... via my friend, John Demartini in *The Secret* ... We've been attracting some interesting patients since you started getting there like this... well I won't say it, but remember with the hearing and the sounds ...

AK:           With the hearing, the sounds... and we've had the Parkinson's patient. That was...

DS: Dr. Klotzek has this Parkinson's patient. I think the guy's going to be off medication.

AK: I think he is. He ...

DS: I hope he doesn't mind us talking about him.

AK: No, no. He came in. He's had some traumas. He's had some ... he had spinal fusion... and he's developed Parkinsons.

DS: So when we get back we should talk a little bit about... you know some of the other interesting cases we've had.

AK: Yeah, let's do that.

DS: Just so people know that it's available. Okay?

AK: Okay.

DS: So, we're going to take a little break here. I'm Dr. David Stussy and this is the BigBrain Radio Show, and it's brain waves to radio waves and we're here to let everybody know they are BigBrains. Be right back.

(music)

(music)

DS: Hey this is Dr. David Stussy and we're going to "hold on"...

(music)

DS: Yeah...

AK: That's a good song.

(music)

DS: I'm going to hold on... where there's a will there's a way. And that's what we've been talking about. When you can see things that you know make a difference with people, you can't stop talking about it, it doesn't really matter what people say, you know you want to make a difference. And when people really stop to think about it, it's individuals that make a difference. Our own experiences dictate how our life should be, and when you live outside those experiences you're going to have some problems. You're going to have fantasies, you're going to have upsets...

AK: Yeah.

DS: And so...

AK: They make you grow...

DS: ... The BigBrain Radio Show is just so you know more about yourself, your own experiences so you can see how life should be the way you always wanted it to be. BigBrain radio waves. Huh?

AK: I like that.

DS: So anyway... We were doing our little models here. I did a little bit of that at the end here. This is...

AK: This is probably the best model I've ever seen.

DS: This is the brain before you get treated and this is your brain after.

AK: When I first saw that in the office, I just ... I loved it. That was awesome. (laughter)

DS: And then another reason why I show people ... why things get injured... I have a slinky... Oh, for the people on the radio show, I have this little, real multi-colored thing. It's ... I forget the name of it. And when you open it up it just...

AK: It just expands and everything.

DS: And then I have in my hand a slinky and the slinky is... that's really how the spine gets better. It unwinds. Okay?

AK: Yeah, that is a great analogy. That...

DS: So one thing...

AK: ... shows people what happens to them.

DS: Right. They get retracing or recovery symptoms. They're going to get some changes but they're all because this has to happen.

AK: Mm hmm. And that's why we treat the whole spine.

DS: For those that are at home there, we can't... I have on my red glasses and Dr. Klotzek has on his green glasses.

AK: Green... yeah... feeling different...

DS: Yeah, I think I've probably had enough therapy. How about you?

AK: (laughter) I think so too.

DS: So I can remember what I'm going to say. And then we have these glasses. These are really cool.

AK: Yeah, these are interesting. These are really cool glasses.

DS: This is treated by a ...

AK: And this is part of our brain-based program. Mm hmm.

DS: These are ...they look like ... what are those racing sunglasses?  
You know?

AK: Serengeti's?

DS: Nope. The athletic people.

AK: Oh, I don't know.

DS: Anyway, they have these glasses... they started out with these  
with the colored.

AK: Uh huh.

DS: Inside there's four sets of light... there's eight sets of lights  
which blink. And they go in and they stimulate your brain from one  
side or the other or in a different pattern, or high or low, one being  
parietal lobe or the other part of your brain.

AK: Mm hmm.

DS: The temporally lobe... and the guy who developed this put it on  
a team... I think it was at Stanford... And he changed... he noticed...

AK: Swim team. I think it was a swim team.

DS: Swim team, yeah. He noticed that which side of their brain they were using depended... so he used these glasses... they stimulated... and a couple went on to being Olympic champions.

AK: Yeah, yeah. They did really, really well with it.

DS: And so we use this for people to ... just to be able to wear when they're doing athletic activities. We've had a lot of success with athletes.

AK: Uh huh.

DS: Um... and of course, people in accidents, they have lots of damage that they can't change because they have to use their eyes all the time, but they're using them improperly and we've got to find ways to make them not do that.

AK: I think that's what makes our program very unique, that we consider that part of the actual injury. I don't think a lot of people look at the brain as even getting injured in a lot of these accidents...

DS: And even if it wasn't injured, it has to be stimulated to make the change.

AK: Yeah,.

DS:           Because the brain has lost track of some of this... muscles and tissues are not real high on the evolutionary scale.

AK:           Right.

DS:           So they're not tied in that much to their brains. We think they are, but when they are...

AK:           Yeah.

DS:           When they don't get the feedback then they can't get rid of the pain.

AK:           Yeah, it's almost the same analogy as you know... if the eyes and the neck are connected how could you possibly have damage to the neck and not affect the eyes.

DS:           Right.

AK:           You know? So...

DS:           That's a good point.

AK:           Yeah, you just... it's impossible.

DS:           Well said! I like that!

AK: It's very impossible.

DS: You know another thing ... everybody knows Dr. Zena... she's done the radio show. She called me the other day. And I've...

AK: Oh yeah, this was funny. (laughter)

DS: I've been after her to wear a heel lift because she should wear it, and she knows better. But you know, she's into the hormones and she thought all that stuff would do that...

AK: Uh huh.

DS: But she's still... she wants to play tennis. She can't play tennis...

AK: Uh huh.

DS: ... 'cause she gets this neck pain. I said, well put a lift on it. She wore the lift and she played... she's playing kind of competitive people. Didn't have any pain. (laughter) She calls back ... like she'd made the greatest discovery in the world. So I have in my hand a heel lift because we give...

AK: While we're thinking, well what took you so long.

DS: ... There's a thing called a functional short leg, which I discovered way back with Dale Buck... is that your body will pull one leg short to try and help the neck and the back out...

AK: Mm hmm.

DS: But that will cause further fatigue and damage so the heel lift counter-stresses that. It's not to make your pelvis level, but it's actually to correct your mid-back and your neck.

AK: So that's important stuff.

DS: So we use that a lot in the clinic.

AK: That's an important part that you bring up. You have to... you know... wouldn't you agree you have to look at the whole body to see what happens... um ... and that whole idea of how force is transferred through the entire body.

DS: You know... and sometimes people say they are, or think they are, physicians, but they're really not that... looking at it in its entirety.

AK: No, they're not.

DS: You know and that's why we do ... like I've been doing acupuncture for 30 years because I know at first the pains just got to

be treated, or the scar tissue ... acupuncture works great on the scar tissue.

AK: Mm hmm.

DS: And that's why we use a lot of the balance things...

AK: Yeah...

DS: ... that have already been used, but we've taken...

AK: Yeah, we do some of the... for balance disorders we do gate stabilization exercises, which are exercises with the eyes and balance, that have been used for many, many years. But we've tailored them to the brain-base model.

DS: Right. Well one of the things we've talked about, just to quickly say, is that one... after these injuries one side of the brain is not as effective as the other.

AK: Yeah, and that just creates an imbalance.

DS: Yeah, and that's what kind of perpetuates the muscle. So this is the unique thing that we put in besides some of the other stuff.

AK: Yeah.

DS: So... we could probably talk about this forever, huh?

AK: (laughter) We probably could talk about it forever.

DS: (laughter) Maybe we'll just go have lunch after this...

AK: We'll have to come back another time...

DS: ... and talk some more. But our real purpose you know is letting people know there's hope.

AK: Uh huh.

DS: People who are injured, of any kind, are disorganized. Their brain is disorganized and so from the beginning they come into our clinic our attempt is to organize their nervous system, have them feel like they're in the right place for the right reason so that they have hope. And it's not that we're giving them false hope, it's real hope.

AK: It's real hope, you're right.

DS: And ... and it's to have people get the results and everybody's different... and I think the hardest part of the job is keeping people motivated through the pain and whatever it takes. You know?

AK: Yeah, you're absolutely right. It's to get them through that.  
Mm hmm.

DS: You know and we help them with the insurance companies and all that stuff because the insurance companies are going to be who they are and the patients are going to be who they are. And even doctors ...

AK: And our interest is for the people.

DS: So the big thing is we want to be the BigBrain for patients who have injuries. Okay?

AK: Yeah. I like that.

DS: So we really... really, really..

AK: Very well said. I like that.

DS: So, this is Dr. David Stussy. If they have anything they could give us a call at 612-374-3392. Right?

AK: Mm hmm.

DS: 612-374-3392. Or, you can go online at [info@bigbrainradioshow.com](mailto:info@bigbrainradioshow.com) and we'll talk to you. Hey, everybody have a BigBrain life. This is Dr. David Stussy and Dr. Adam Klotzek saying brain waves to radio waves.

(music)

(end of radio show)