

BigBrain Radio Show
3/1/08
Dr. Zena Xanders

(music)

DS: Hey good morning, it's Saturday morning. This is Dr. David Stussy and you can call me Dr. D.

ZX: And this is Dr. Zena Xanders and you can call me Dr. Z.

Both: And we are the BigBrain Radio Show.

DS: Well Dr. Z, we haven't heard you for a long time. It's good to hear your voice again.

ZX: Hey-oh! I'm calling in from beautiful Beverly Hills, California, just to be on the BigBrain Radio Show.

DS: So we could actually say "Live from the BigBrain Radio Show in Minneapolis and from Beverly Hills"!

ZX: Live, from Beverly Hills. Yeah.

DS: Well it's good to have you back, because I've had people wonder if you were... what you were doing. I said you had a lot of interesting things you're up to.

ZX: Well yes, and I wanted to give a shout out to the listeners. They've been just wonderful, because whenever they've heard a, perhaps a repeated show, I've always gotten emails and I really appreciate the sentiment and the people have missed me. So thanks a lot BigBrain Radio Show listeners.

DS: Well, I think that comes from their heart. So it's the heart and the BigBrain. So what are we going to talk about today? We are going to talk about the love... Remember we had a show called the "Love Show" and it's been really popular. People have liked it. And then we've talked about the heart many times. And so when you start taking a look at love, the most... kind of the one that gets the most press is called romantic love, right?

ZX: Well yeah. And just to remind me again ... refresh my mind. We did a couple different shows on love and they included music. Right?

DS: Yes it did. I think it was played...

ZX: Right.

DS: We played it recently.

ZX: Great. Great.

DS: And what we did is we took music, played it and then kind of gave a background to it... um... as to how it ... you know what kind of emotion it brought up, what kind of love it was... Because everybody knows there's all kinds of love. And of course, you know I'll go back to the BigBrain philosophy is that we are actually a BigBrain, which means our mind is an extension of the physical brain, which creates our life – the quality of our life. You know what we... the questions we ask about life, the essence of life itself is a metaphysical or BigBrain process. And of course, you know I'll quote my favorite author, Buckminster Fuller, you know gravity is the physical stability of the universe but the metaphysical stability of the

universe is love. You know we're actually talking about the love that connects to all of us as humans. But then there are special kinds of love, which... I guess we could call it romantic love. We were talking about what that really was earlier... and um... you know what's your feedback on the term 'romantic love'?

ZX: Well I just wanted to interject here that ... um... in your excitement to do a show on love, which seems like you need to do one at least every quarter. So I know you are just one big love bug... it's become quite obvious to me. I'm sure the listeners can hear that too, which is one of the things that makes you such a great doctor by the way. But you were especially interested in how love is really a chemical reaction... that love happens in the brain. And you know my favorite topic is hormones, so once this attraction happens there's just this cascade of hormones that really when we fall in love, whether it's romantic love or what we call companionate love, um... it's really a neurological, hormonal...

DS: Yeah I think really it is.

ZX: ... event.

DS: It is a neurological event. You know we also include the heart. Now today we probably won't bring the heart in as much as we have, but you know the heart is always the feedback. It's kind of our source of, you know how it feels right for us. But, even that ends up being hormonal because the heart is an endocrine organ, which we ... we... have revealed to everybody earlier. So...

ZX: Right. So... I think that love is a psycho neuro endocrine event.

DS: Wow.

ZX: How's that?

DS: So psycho means it's just how we think about it, what we're trained to think about. You know, kind of our expectations a little bit.

ZX: Right.

DS: And then neuro means the brain has to interpret that ... and I guess we get some feedback and then given whatever our context or way we think, whether we're male or female, old or young... even cultures... and then we get neurology... and then of course the hormones take over. Right?

ZX: And that's the endocrine system.

DS: Yes.

ZX: Well there you go. It doesn't... it doesn't sound very ... (laughter) fun or romantic, but we'll get to that.

DS: Well romantic love is interesting because it's probably the passion that most people if you ask about joy in life... you know whether it turned out or not... you know it always brings a smile to their face... well, usually it does. You know I saw this... I had this article, it's called "Love in Four Acts: What is Romantic Love?" And this person came up with this term called "limerence"... L-I-M-E-R-E-N-C-E.

ZX: I love it. I love it.

DS: And that was what... and that was what romantic love... because it was a paradox of rapturous experience... you know feeling like you're having experiences no one has ever had before. And then... ah... I think it's almost like you can't control it. Right? Do you agree with that?

ZX: Well yeah. And limerence she says is fiery, euphoric, afemoral... and this is Tenov is the person that ...

DS: Oh yeah, Dorothy Penov.

ZX: Dorothy Penov.

DS: Right.

ZX: Yes. In her book "Love and Limerence". Love it.

DS: Well I had never even heard the term before. Had you ever heard it?

ZX: No... and we... we're kind of smart so you'd think we would have heard of that. I love that term actually.

DS: That's why we do the BigBrain Radio Show so we can get smarter, right?

ZX: (laughter) Right.

DS: You know, when we are feeling love we are completed she said. We assume that a single ingredient... we tend... assume that a single ingredient is all we need for a relationship, which is romance. Now I think we could probably ask everybody out there if that was true, because romance in itself, you know what she's talking about here, really doesn't carry it through. So what is romantic love? You

got any feedback on that, or what you think... what path you want to head down on that?

ZX: Well... I'm sorry I just got taken with your ... um... distinction of limerence. And I just want to... again, I feel like the party pooper here today, but part of the things we've learned about romantic love is it just serves the purpose to get us attracted and hooked. It's like a game. It's like the seduction. And it's really so that we can ... um... ah... you know continue the species (laughter) from a genetic point of view. Because if we never got attracted, we'd never hook up and have sex ... and then it's the limerence and some of this longer... The limerence... when the limerence dies, the relationship will die if there's not something deeper than that. And really, as human beings, we give birth to our babies before they're fully developed. They have to finish their development on the outside, where... or we could never get them out of our bodies. And that requires that two people really... well in the past anyway, two people had to be around to raise this infant because it is vulnerable and cannot live until it can walk and function, which is age 2 or 3.

DS: I'm not sure if it was in this article, but they started to talk... why is it that there was a shift towards romantic love about 800-900 years ago... and that actually changed the development of the pelvis not being so big, so babies were born and actually kind of had an absence of love or something like that. Did you see... do you remember reading that or not?

ZX: Well I remember reading that 900 years ago, our pelvises were larger and our brains were smaller.

DS: Right.

ZX: Today, our pelvises are smaller and our brains are larger.

DS: (laughter)

ZX: So... ah... you know we've got to get those babies out so that they can develop because we can't hold as big a baby as 900 years ago, anyway. So it's just very interesting... why we fall in love, what kind of love we fall in, what purpose does it serve... And then later in the show we can talk about this idea of... If you're actually going to stay with someone in a relationship, you actually have to like them.

DS: (laughter) Right.

ZX: You know it's just not even enough to have romantic love or to have this love that lasts a little longer so you can accomplish a task together or a... raise a child to 3 together. You actually have to... the catalyst has to be liking each other.

DS: Right. And you have to actually be willing to see both sides. And part of the BigBrain philosophy is there's always a positive and negative representation in every experience of life, and in order for us to see that we have to take one side or the other. A lot of times this tends to be negative, especially when it's repetition or something we're common with. And so part of it was to take and be willing to continue to see the positive sides, which sometimes gets hard in couples. And that woman, Dorothy Tenov you talked about...

ZX: Tenov, yeah.

DS: She called it stirring the oatmeal love.

ZX: (laughter)

DS: It represents a willingness to share ordinary human life... to find meaning in the simple unromantic test to find relatedness, the value of the beauty in the simple and ordinary things, not to eternally demand a cosmic drama or the extraordinary intensity of everything. I thought that was pretty good because...

ZX: Excellent. Excellent. And just to continue our thought on this, she says when we're in limerence with someone we want to be with them and we want them to like us. When we're in lust with someone, we just want to have sex with them. (laughter) So again, we could talk about later in the show this difference between love and sex, which one's stronger, which one's more important... which one's greater.

DS: Well yeah, I think the sex just starts the little seed going like you said. But love, I think, would triumph over all. Um...

ZX: But to get back to your question about romantic love... I mean... I'm not sure which definition you're referring to, but I think typically we think of that romantic love is that it happens fast, it's sudden, it's like a bolt of lightening, it feels uncontrollable, it makes your knees weak, fireworks, and... um... you know that isn't necessarily... that isn't what's sustained. And I think we even talked about there's certain hormones for that part.

DS: Yeah, I gave you those four parts... I didn't bring that sheet. So I gave you those four... those hormones with that initial stage.

ZX: Well one of the hormones is called phenylethelananine. It's a chemical that our body builds up a tolerance too, and the body requires more and more of that substance to acquire that love spark. So this is interesting. Neurobiologists say it takes about four years for the chemical to fade, to run its course. Once the chemical is gone, the couple is faced with a difficult challenge of doing love with their own basic brain chemistry. (laughter)

DS: So this is kind of where infatuation shows up.

ZX: No wonder so many fail. We're left with only our brain. It's kind of like your long-term love. It really depends... It's like when you make a baby, they always tell the mom's you know take your vitamins, do your prenatal care, because you're actually creating the baby there. It's kind of like whatever kind of brain you had before you were struck by lightning, you're going to be back to that, maybe less, because now you're four years old. So you've got to actually prepare for love way in advance. You have to have a healthy brain to have a long-term successful love relationship.

DS: And that's... that's kind of the point we want to get to, that the brain really does control this whole concept of love and who we are. And that's why we call it the BigBrain Radio Show. And I think we have some very, very interesting things to share with people because everybody has an insight... wants to have insights into their relationship. And you've got Dr. Phil and all these other people... giving advice. It's kind of psychological like you can just change any way you want. But it's nice to know where it comes from and how we're driven.

ZX: Well right. And what... what starts before the psychology?
Like the actually... the actual chemistry and biology of the brain
before the mind and the psychology gets involved.

DS: Well this sounds like a darned exciting show...

ZX: I'm going to go take some...

DS: Great to have Dr. Zena!

ZX: I'm going to go take some vitamins right away before we come
back.

DS: Okay. We'll be right back.

ZX: All right.

DS: BigBrain Radio Show.

ZX: Great to be back.

(music – John Denver “Perhaps Love”)

(music – John Denver “Follow Me”)

DS: Hey, welcome back... to... I was going to say to the John
Denver show.

ZX: (laughter) I'm crying over here.

DS: Yeah... let's listen to a little more of John Denver here.

(music – “Follow Me”)

DS: Hey, welcome back to the BigBrain Radio Show. This is Dr.
David Stussy, and we have on line with us from Los Angeles,
California... Beverly Hills to be certain... Dr. Zena!

ZX: Hey everybody! Dr. Zena Xanders here. Hoping you're all staying warm.

DS: Gee, I was expecting to hear some clapping. I guess I'll ... (clapping)...

ZX: (laughter) There you go.

DS: I'll do the clapping, okay?

ZX: Thank you, thank you. Yeah, it's great to be back live!

DS: So, the show we're doing is called the Love Show and we're doing the Love Show because one of the greatest drives in the human existence is our love... our ability to love. And of course... what do you call that... What's the parent love... it's called...

ZX: Well there's filio love, agope love...

DS: When they don't worry about the consequences. I just got a blank here. Anyway... there's ... love... unconditional love, excuse me. Unconditional love is really what holds the universe together. You'll find it in all religions and all philosophies. But then there's the love that tends to drive the human race, especially the media and the things we see today... and that's romantic love. I mean... you open *People Magazine*... (laughter) it's pretty much looking like a high school newspaper because they're just reporting on who's dating and who's in romance and who's not, etc., etc. And I think that almost distorts romantic love. And ... um... one of the things we started to say is that there's the... there's the interest or the attraction, which is sexual; there's the romantic love, which is the infatuation; and then there's the commitment, which is really where people have to kind of

learn to untangle themselves and learn who they are apart and together; and then the long-term commitment and sometimes even rejection and renewal. Okay? So I think we're going to touch all those today.

ZX: Well let's face it, it's one of the things I think that everybody's interested in. (laughter) And it affects everybody.

DS: Well and the thing is that we actually control a lot by the hormones... we started talking about that... and we can always use our... our trained brain if we are... to understand what is happening to us and make sure we keep things in context.

ZX: Right. Well, that's the wonderful thing about being a human being now is because we have a neo-cortex. We actually have this big huge front part of our brain – the executive part of our brain – that when all these hormonal cascades start happening, we can actually try to reason with ourselves. (laughter)

DS: (laughter)

ZX: You know, there's a possibility.

DS: Yeah.

ZX: But those chemicals are awfully strong.

DS: They're very strong.

ZX: So you have to kind of know in advance what's going to happen. (laughter)

DS: So we had this article called "Love is More Powerful than Sex". Right?

ZX: Right.

DS: And the upshot is love is the more powerful emotion. Do you want to say anything about that?

ZX: Well, um... what I wanted to say is that... you know sex is to attract, to get a job done. But love is what keeps enduring. So, um... we really want to... we... they actually involve different parts of the brain. Sex and romantic love are different parts of the brain. And... romantic love is one of the most powerful of all human experiences. So... what are you going to say?

DS: Yeah. Well activation for intense, romantic love is on the right side of the brain... because it's associated with facial attractiveness... excuse me... in facial attractiveness, the part that we first kind of... you know we first get caught up is usually facial or some smile like that, or a certain look...

ZX: Well the attractiveness...

DS: ... that's on the left side.

ZX: Yeah, that's on the left side... the actual like kind of visual looking part. But then the romantic feeling part happens on the right side. And that's chemicals released called dopamine.

DS: Right, and that's kind of...

ZX: So love actually starts in the brain with a chemical release of dopamine.

DS: It goes to the heart and goes to everything else.

ZX: Dopamine is an... like an amphetamine... like cocaine. So basically we're getting this big rush – this high – on the right side of the brain.

DS: Remember when... excuse me, I'm sorry. I remember when we were talking about women, about how women go to like the bathroom together and ...

ZX: (laughter)

DS: ... in a group, and that actually stimulates dopamine. Is that correct?

ZX: Well let me just... (laughter) Let me just elaborate on what we had said there. Yeah, they go to the bathroom together, but the reason they go together is not because they want to pee together...

DS: (laughter) No, I know that!

ZX: ... it's because they want to talk.

DS: No, I meant that. (laughter)

ZX: Women go to the powder room because they need to chat. And as they chat, for women, it releases dopamine, which is that... that... gives them that relaxed and kind of high feeling. For men, I don't know, I think they just all go to pee together. I don't... there's no dopamine released there.

DS: I don't know, it's just...

ZX: They don't talk! (laughter)

DS: No they don't.

ZX: That would be like rude to be in there chatting the way we would chat.

DS: Probably. Ah... you know the study says that as romance matures, so does the mind. So we actually ... um... take these initial stimulations and then we create patterns around those.

ZX: Yeah, love actually develops our brain.

DS: It does, it actually does. And so the ability to experience love... and of course it's always so confusing, especially teenagers, because they don't have a developed frontal cortex until... up to age 25 sometimes. And so they get more limbic or emotional and they get more hormonal, I guess would be a good way to put it (laughter).

ZX: Little bit... little bit.

DS: And so it's hard for... and then they've had... they've had social instructions and psychological instructions, and religious input and all this stuff. And like you were saying before, that neuro... or that psycho neuro endocrine process starts there because they have a number of things in their head that they have to balance against these strong emotions.

ZX: Really. I know, it's kind of like God's trick too. I'll have to talk to God about this later, but why he would have the hormone... you know why he'd put such an undeveloped brain on top of such a hormonal being. I guess it was just to ensure that we would carry on. If we could think about... If we could know and think about what was going to happen once we fell in love, probably nobody would rationally do it. (laughter)

DS: (laughter) Huh! Well, if you had a head injury that would hurt it too then.

ZX: Well yeah. And people who have had brain injuries do have problems with love and relationship and it also reminds me of those early studies we all know from Psych 101 in college, is you know, if you have a baby and you don't give it love, you just kind of leave it unattended without any affection or love, it will die. You know and part of that I'm sure is the brain development... the emotional release of those chemicals to help the human being grow.

DS: So...

ZX: You'll wither and die.

DS: You know I thought the coolest statement is the one you made just a little while ago saying that the... that love and romantic love in its different stages of maturity actually help our brain to grow and actually develop us as human beings. That's pretty interesting.

ZX: Mm hmm.

DS: And so the interesting part is when you get two people who are willing to stay together they have to really look to see the essence of that love and continue to see both sides of all relationships. And it is really easy to see the negative side after a while because I think it's kind of what it is to be human sometimes. Like I always tell my staff that when you let a patient just sit they're going to think things, and when they think things they're just going to think negative things. And... ah... I think we really need to train ourselves to see the positive things of relationships and what they can mature into.

ZX: Well when those feel-good hormones go, the tendency is to be more negative and critical – you’re right. So, how do we train our brains to keep it balanced then?

DS: I think we will look at that. That should be a very interesting concept. All right?

ZX: Sounds good. I love chatting you know. I’m just having this huge release of dopamine. I think I’m falling in love with you.

DS: Oh, thank you.

ZX: (laughter)

DS: And I... what is it... what’s going to attract me? I gotta find out in the next episode. Okay?

ZX: Hey men, it’s a clue. If you want women to fall in love with you, talk to them.

DS: Let them talk, let them talk. Okay. This is Dr. David Stussy, BigBrain Radio Show. Be right back.

(music – John Denver)

(music – John Denver “Starwood in Aspen”)

ZX: Wow. This is Dr. Zena Xanders, reporting in to the BigBrain Radio Show, live from LA. And with me, in studio, is ...

DS: Dr. David Stussy.

ZX: Hey, what a beautiful song. Of course I know that song. What was I thinking?

DS: I thought you’d like that... from LA.

ZX: Oh yes. Hard for me to not get choked up. I miss everybody there in Minneapolis, but it sure is nice out here. (laughter)

DS: (laughter) Don't tell us the temperature. It's warm here too. I was out sunbathing earlier.

ZX: Yeah, it's like -10.

DS: Thinking about... no, no, no... I was out water skiing. (laughter)

ZX: (laughter) yeah right.

DS: It's not cold here.

ZX: Well anyway. I... I have to say that I am in love with L.A., which is another show. (singing) I love LA.

DS: Oh yeah.

ZX: Randy Newman Show.

DS: Oh yeah, we got that one too.

ZX: Yeah. Okay. You know there's a lot of people from Minneapolis out here too... so Minnesota. So... Anyway, back to our romantic love show. What's up next, Doc?

DS: Well, I just had this little thing I thought was a nice summary of... Romantic love does not use a functional specialized brain system. It can be produced by a constellation of neurological systems that converge into widespread regions of the caudate, which is part of your basal ganglion, where there's a flexible combined... combination map, representing and integrating many motivational stimuli.

ZX: Okay, that was a total buzz kill after that song.

DS: Oh, I think... (laughter)

ZX: (laughter) Couldn't you make that a little more romantic?
What was that? You're reading...

DS: What they said is once you get it on you can keep it on just
based on everything around you. Okay?

ZX: (laughter) okay, great.

DS: Was that better?

ZX: Something like that.

DS: (laughter)

ZX: My brain had to go in too many different directions to get to
that. Okay.

DS: Well I just thought the way...

ZX: All right.

DS: ... summarize. It really isn't any special place, but we are hit
by everything that happens. And we are not as in control as we think
we are, and yet we are controlled when you use it. Right?

ZX: Okay, good.

DS: So... um... I was... I had this... Where did it go? "The Affair
of the Lips"... it's from *Scientific American* actually.

ZX: Okay, what do you know about the lips?

DS: It's about kissing.

ZX: Okay.

DS: Kissing is probably the number one... I was looking at... I had a *National Geographic* and they were talking about that you have visual contact and then you touch and then you move together. Well the touching... touching is usually a hand and then a kiss. Right? And the lips have the highest... one of the highest combination of... it takes a third of your body's motor and sensory system. How's that?

ZX: The lips. I thought it was the jaw. Must be the jaw and the lips.

DS: No, it's really the lips more than the jaw even.

ZX: Wow. Well it's not as romantic to kiss the jaw. The TMJ... (laughter) It doesn't quite do it for me. I don't... But you know there is an erogenous zone there, right around the ear. So there probably is a lot of neurological nerve endings. Can we talk about something else? I'm getting really warm... (laughter)

DS: (laughter)

ZX: Let's go on to something...

DS: A kiss triggers a cascade of messages, tactile sensations, sexual excitement, feeling of closeness. It conveys important information. In fact, a bad first kiss can abruptly curtail a couple's future...

ZX: Oh, no kidding. A bad kiss is a deal breaker.

DS: (laughter)

ZX: Are you kidding me?

DS: Kissing has evolved... they actually think it's from the mother's practice of feeding their young that way, sometimes, but I thought that took away.

ZX: (laughter)

DS: But it causes all kinds of internal changes and it stimulates all the cranial nerves. And you know from your studies that that... you've had a connection from internal human tissue and external human tissue really connect at that point. And... so it makes it very intimate. And... um... for women, the... there ... in this study, kissing itself wasn't enough to raise their oxytocin... or oxytocin...

ZX: Yeah.

DS: But it was the environment that it was given in.

ZX: Well, right. Ambiance is everything.

DS: Yeah, it wasn't... it wasn't pivotal. But... for men, they considered it just pretty much the next step ... that they were... had in mind. Okay?

ZX: (laughter) That sounds about right.

DS: So kissing is... But... I was just talking ... because kissing is very unique. You ... Actually, do you know what the scientific term for kissing is?

ZX: You know I think we should do a show on kissing. This is really about love.

DS: Well, kissing is the initiation of love. Okay?

ZX: Right.

DS: Because it is where they... you see people... you see somebody, right? And then you want to touch...

ZX: (laughter) You want to kiss them.

DS: And then you want to kiss.

ZX: (laughter) I see you; I want to kiss you.

DS: Okay, well the scientific term for kissing is called osculation.
Did you know that?

ZX: Okay buzz kill.

DS: I think that's interesting.

ZX: I want to osculate you.

DS: Now how impressive would that be in the right environment?

ZX: (laughter) It depends on how much tequila has actually been consumed I think.

DS: Osculation. O-S-C-U-L-A-T-I-O-N.

ZX: Did I tell you that your cocktail chatter needs a little work?

DS: Um... It actually conveys a hidden message. So kissing is very... is paramount to ...you know to our survival as a species.

ZX: That's a good one. The next time I want to know about holding hands.

DS: I don't know about the holding hands. I couldn't find an article on that.

ZX: That must be more about the companionate love. Kissing is the romantic love, and holding hands is stirring the oatmeal... it's companionate love.

DS: It could be touch... oh yeah, they said that. I read this article where these people were looked at, because what they had is they

showed an extraordinary amount of romantic love after a number of years of being together. And touching their hand, that's... the reaching for the other person was very paramount with with.

ZX: Well, and there's a lot of nerve endings in the hand too.

DS: But the one... you know because... I thought... I don't think people keep holding hands as they move along, do they?

ZX: You know what? I always think a couple that's still holding hands... is very romantic and I think it shows extreme depths of love.

DS: And I would have to agree with you.

ZX: Right. So be a good hand-holder and a good kisser.

DS: Okay, so we've established two things there that you could actually ruin the whole relationship with the first kiss. Right?

ZX: Oh yeah. Many relationships never get started because of the bad kiss.

DS: And kissing is a very important part... and they also said the smell associated with that... pheromones, is that what it's called?

ZX: Yeah, I just wanted to tell you too, a lot of that talking going on in the ladies' room is about was he a good kisser or not.

DS: (laughter)

ZX: This is all kind of coming together in this holistic synergy of the love show. But yeah... the... what were you saying? I got distracted. I'm sorry.

DS: Pheromones.

ZX: Pheromones, yes... the smell. Well and this is really interesting because a lot of women are on birth control pills. And when you're on birth control pills it... which are terrible, but that's another show... it gives you fake hormone smells, or your natural smell doesn't come through. So a lot of women are falling in love on birth control pills, they get married, get off those pills... they don't even like each other any more. It's not the right smell.

DS: You know I actually have an article that... their ability for women to trust really depends a lot on that hormonal reaction. You're talking about it and it... confuses them sometimes.

ZX: Right... right. Well a woman is genetically DNA, you know, created to sniff out a good partner. So if the partner... you know if her sniffer's off, really, she's not going to pick the right guy. You'd be amazed who you'd pick as a partner if you weren't on birth control pills. But anyway, that's another show.

DS: Actually there was a study I read and they tend to pick out... the smell involves people of other genetic backgrounds, or other... little bit different background...

ZX: Well what it is ... you're actually smelling their immunology... because what human being is trying to do is survive. So you try to pick someone whose immunology is a little bit different, but complementary ...

DS: That's exactly right. That was what it was.

ZX: ... so you can build stronger human beings and beat your... beat the bug... beat the viruses... because human beings are in a constant battle to survive with viruses.

DS: That's exactly what it was. Thank you. You completed that for me. So now...

ZX: Yeah.

DS: ... we know that we're actually... we're creating a destiny for your future... for your future... um... children and their children.

ZX: For the survival of the human planet really.

DS: Right, so when we get...

ZX: ... the polar bears, I don't know.

DS: Well, it's kind of interesting because you know we as chiropractors know about chemical interference with the ability of our bodies to process to heal. So it could actually interfere with the ability of the... the body's ability to ... to... make a right partner choice. Right?

ZX: Oh yeah... yeah.

DS: Or continue to have that partner choice. So what are the peoples that people do when they're in love? What do they do? They pick out things that they share. They pick out things that they feel that they... you know you get into the part with ... the courtship they had – the first part, which is the infatuation. And the second part of the courtship they called it entanglement, where you have to ... or interdependence... where you learn to kind of make choices together,

but you know still keep your individuality. So how does that show up?

ZX: You know I think that's one of the greatest challenges of being in love or being in a relationship... is you... you... tend to start in this enmeshment, or this entanglement – emotionally – or you don't even feel like two people anymore. You're like oh we're one... everything's the same... we think ... we're thinking of each other all the time. And then that starts to wear off and then how do you be yourself and be a sovereign person and still be connected and in love with this other human being. I think that's the great challenge of relationships.

DS: Well I think what you said before is actually... somehow within the infatuation, picking out a person who has intelligence, who has characteristics, has talent or whatever, so they can have something... when it tones back down there's something left over.

ZX: Right. Well and that brings up that likeability factor that we talked about. In this article that I'm looking at here they say that liking the person is a catalyst for the relationship to actually continue. And that while romantic love is sudden and companionate love grows very slowly over time, over knowing someone for a long period of time... it's the likeability that's the catalyst that's going to keep the relationship together after all of those hormones wear off and the kids are grown and gone.

DS: So um... how would we bring that about? I think it's just knowing that it's possible. You know I have this article it's called "Keeping Love Alive" from *The Wall Street Journal*. And actually, it

was just this February 8th. I think it probably was around Valentine's Day (laughter). Ah... this ... They studied a couple of couples that had ... and they did MRI studies on them... and oddly enough, when they... when they... under the MRI – the functional MRIs – when they were show a picture of their husband... They did it on two ladies. When they showed a picture of their husband, they actually stimulated that interior tegmental area that shows up in romance. That was interesting. So they were able...

ZX: By looking at a picture?

DS: Well just something that would make them think of their husband.

ZX: Sure.

DS: And they have a... and so there were long-term bonds that they had continued to develop within that area that romance usually starts.

ZX: Mm. Yeah, laying down those neuro tracks and then you can re... ah... re-fire them.

DS: Well they did it because they said ... in spite of you know all through early love, despite the years of marriage, busy jobs and demands, they had made an attempt to continue to see each other and their ability to contribute to each other to develop as human beings and to contribute what was possible on the long-term commitment of love, which we... is really what people ... you know... people expect and then they don't understand why it happens. So there's actually some... I don't think they work at it, I think they just... it's really the BigBrain look, which is when you look at things you have to... you

have to have a difference in order to perceive it. But then you also start seeing that .. that... instead of just seeing the negative, you always have to keep looking for the positive in things. And we talked about it a number of times on the BigBrain Radio Show.

ZX: Well and also the things that we would call faults, I like to call them quirks...

DS: (laughter)

ZX: So you end up having...(laughter). You end up falling in love with that person's quirks, which is I think really the evolved challenge of long-term relationships.

DS: Wow, that's really good. I like that. I like that.

ZX: So love people because of their quirks. You know when someone dies, it's those little things that we didn't like all those years that we actually really miss. You know, we'd give anything to have that quirky thing back again.

DS: Oh right. That's very good. We talked about that earlier, didn't we?

ZX: Yeah, so if you can learn to love the person's quirks while they're still alive, you're way ahead of the game.

DS: You miss those small things when they're gone. Right?

ZX: Yeah, like socks on the floor and the refrigerator door open.

DS: (laughter) The juice thing open.

ZX: The towels that are stained from wiping up coffee off the kitchen floor. You know those little things... little quirks... that's what you miss.

DS: All right. We've got a little show ... the opposite... when something happens when it doesn't go right. This is the BigBrain Radio Show.

(music – John Denver)

(music – John Denver – When I'm 64)

DS: (laughter)

ZX: 64? Wow, that's really old! Holy smokes!

DS: I don't think that sounds so old to me. That doesn't sound that old.

ZX: No, that's what I mean. Will you still love me when I'm 64? That doesn't seem very old.

DS: Yeah, but did you hear what he said? You'll be older too.
(laughter)

ZX: Yeah. I thought he was going to say 94. I hadn't heard that song for a while. 64 is like young these days.

DS: (laughter)

ZX: Aye, aye, aye.

DS: All right. So, what we had going on was just a little bit of the other thing, when you get rejected in love, and then... you know long-term love obviously would last... will you still love me? And I think that's really what it's about, with our brain, creating love. And it

actually has to do with sharing little bits of romance... continuing. So we were talking earlier about romantic shows... and you know every guy has the thing about going to the girl shows... but I'm telling you, any good show always has a love relationship – just about any good show...

ZX: Oh yeah, even the high action drama adventures. There's always usually a love story as a subplot.

DS: Always in there. So, I had this list of the top love and romance shows.

ZX: Yes, what are they?

DS: Well, they had...

ZX: So if you want a good romance movie?

DS: Well, I didn't see a lot of these. One was "The Notebook".

ZX: Yeah, I guess that's just a tear-jerker.

DS: That's what it says. Tear-jerker right here (laughter). And they had "Romeo & Juliet".

ZX: Of course.

DS: And then "Dirty Dancing".

ZX: Oh, that's a fun show.

DS: "Lady and the Tramp"... now that goes way back.

ZX: I know... my daughter has that...

DS: 1955

ZX: Yeah, I have the comic video version of that. I don't know.

DS: Those were the top ones. And then a couple of the other ones was “Ghost”? I don’t know...

ZX: “Ghost”, yeah... with Demi Moore.

DS: Oh Demi Moore and Patrick... that was really...

ZX: That was good.

DS: That was good. Another one called “Stardust”.

ZX: I don’t know that one.

DS: I don’t know what that one is either. “Save the Last Dance”, and another show called “Princess Bride”.

ZX: Oh yeah, that’s been real popular. That’s a more recent one.

DS: Now, so what we thought is we would talk about... one of the shows that I think is one of the most romantic show is “Dr. Zhivago”.

ZX: Yes, that is a great show.

DS: Oh, that was a great love show. I mean... that... and I don’t know if you remember how it ends, but he’s running towards the... he finally sees her after he’s been separated from this woman that he loved all the time, and he’s running toward the cable car and he has a heart attack and dies.

ZX: (laughter) Yeah, great! How about “Gone With the Wind”?

DS: Oh really.

ZX: Or... this is a modern day one, but you know this kind of shows my age, but “You’ve Got Mail”? I just love that show...

DS: Oh yeah.

ZX: With Tom Hanks and... what's her name? Meg...

DS: Is that...

ZX: What is her name? Meg Ryan. Yeah, Meg Ryan.

DS: Did that end up with them together?

ZX: Um, yeah, yeah, yeah, yeah.

DS: Well you know there's something you can go on a website called www.theromantic.com, and they have all the love letters people have written – famous people have written each other. And I looked at them and some of them were kind of hard to take.

ZX: What is the website?

DS: It's called www.theromantic.com.

ZX: www.theromantic.com

DS: Then /loveletters.

ZX: /loveletters?

DS: But it's in there... I've got one here... It's from Victor Hugo, which is a famous writer. He said, "My dearest, when two souls, which thought each other for however long enthrone, we have finally found each other in union, _____ and pure, as ourselves... begins on earth but continues forever into heaven. This union is love, true love, a religion which defies the loved one whose life comes from devotion and passion, for which the greatest sacrifices are the sweetest delight. This is the love which you inspire in me. Your soul is made to love with the purity and passion of angels, but perhaps it can only love another angel in which case I must tremble with apprehension."

ZX: Wow.

DS: Victor Hugo, 1821. They had records... they had letters in there from Napoleon Bonaparte that he wrote to Josephine.

ZX: Mm hmm.

DS: And one letter he was just bawling her out because she wasn't writing back. (laughter)

ZX: (laughter)

DS: But it was pretty interesting. So it's kind of an interesting sight because if you know anything about the people – and I'm sure everybody has famous actors or writers and things – you could look at it. It's pretty interesting. I thought some were a little... little complicated. But... almost self-sacrifice... you know? Like they weren't that strong of a person or something like that?

ZX: Well and you reminded me of the other end of the spectrum too. I mean stereotypically for women, look of the sales of romance novels.

DS: Oh!

ZX: I think it's like the number one category or something. You know? Women are into romance and love. If they can't get it in real life, they're going to be reading about it for sure.

DS: So, what we'd like... What are other romantic things people tend to do? You know they ... they go and do things together. A lot of times, like if the wife said let's go to the opera, let's go the dance, would that be a smart move for the man to make sure he does that?

ZX: Well you know... I think that's another show. Because you think that would be nice – and probably you do need to do that once in a while – but you know, it's no fun to go to stuff with someone who it's no fun for them. (laughter)

DS: So when couples... like a lady... so in a mature relationship she would just go with a friend of hers who likes it and comes back and that excitement invigorates the relationship.

ZX: Right. And I think it's a balance, because you do need to do some stuff together or you grow too far apart. But maybe you could find things that are a little more... You know I'm not for if you really hate that you have to do that. You know me, I'm not good at doing anything I don't want to do. (laughter)

DS: (laughter) Well, that tends to be a human characteristic, so...

ZX: That's where the counter-offer comes in. There's a whole other show about counter-offers we could do.

DS: Well, that's interesting. We should look at that. So, what it is to create relationship. That would be a great show, wouldn't it?

ZX: You know, I love you and I would really like to do that because I know you'd like it, but I'll be terrible there so could we... could I meet you for a drink afterward and great sex. How's that?

DS: You know...

ZX: That would probably be a pretty good counteroffer wouldn't it?

DS: It would be very good.

ZX: (laughter)

DS: All kinds of little... there's another thing... there's another website where you can get romantic... oh, there are so many websites I found... love letters and love lyrics... and it would write songs and poems for you. And then... that would be love quotes like...

ZX: Dr. D?

DS: I would fly to the moon for you if you'll be my baby. Now that's...

ZX: Whoa, whoa! Dr. D?

DS: Yes.

ZX: I think you have another love show coming on.

DS: Okay. (laughter)

ZX: You're kind of getting wound up here.

DS: Hey...

ZX: Start making some notes for the next quarter, because I know you're going to need to do this again.

DS: Okay. I'll do that.

ZX: I just want to say what a pleasure it's been to be back on the show with you. And I did want to tell people a couple of things I'm up to, in case they're interested.

DS: You bet.

ZX: Well, I've started a new venture, and it's still in the... well, I guess the romantic attraction phase. (laughter)

DS: In the developmental, excitement, infatuation stage.

ZX: Yeah, right. But in the future I'll be able to share with you some more about a new venture called "Life, the Adventure" which is a series of talks that I'm going to be doing here in L.A. And really just taking into account everything I've learned on this 40-some year journey, that I've been on... love and loss of love, and health and loss of health, and really having every day and every circumstance have the possibility of being an adventure, instead of a drag. Again, if people want to get in touch with me, it's Dr. Zena...the website is www.keepthezestforlife.com.

DS: Sounds great to me.

ZX: drzena@keepthezestforlife.com. I'd love to hear from anybody who wants to be in communication. And for you?

DS: Well you know that we find that when you remove the interference to the nervous system, love expresses itself. So...

ZX: So if people want to love better, love longer, have a better brain for love they should come and get an adjustment with you.

DS: You betcha. 612-374-3392, or anytime on the BigBrain Radio Show.

ZX: Yeah, and that's Kenwood Chiropractic. Right?

DS: This is Dr. David Stussy and Dr. Zena Xanders telling you that we love spending our big moment... BigBrain moments and go out and love the BigBrains in your life.

ZX: Yeah, thanks a lot. Bye everybody.

DS: Bye bye.

(music – John Denver: “You Fill Up My Senses”)

(end of show)