

Evolutionize Your Life: Michael Dowd and Connie Barlow

Week 2 Course Session

Connie Barlow: Welcome to the second session of Evolutionize Your Life. This is Connie Barlow.

Michael Dowd: And Michael Dowd, and today's session is on our physical instincts, our reptilian brain's hunger for safety, sustenance, and sex.

CB: Now last week, our topic of conversation was your larger story, big history and the power of an evolutionary worldview.

MD: And there we covered our best evidential understanding of physical evolution, biological evolution, and cultural evolution as one sacred story, as one meaningful myth in the way that Joseph Campbell used the term myth -- that is, not as an untrue story, but as a story that puts us in accord with reality, that helps us feel our connection to the whole. So, we looked at big history, the epic of evolution, the great story, and saw that we were part of the universe, that we are part of the universe, that we can't be alienated. You can feel alienated, depending upon how you're interpreting your world, but you can't be alienated. And so that sense of connection, that we are 13.7 billion years old, that we're related to all of life, and that one of the most empowering things we can do is have tools and practices like little mantras or little affirmations or memorized passages from someone else, quotes and that sort of thing that remind us of our

profound interrelatedness, our age, our interconnectedness, how big we are, and this trajectory that life has been on for billions of years.

CB: And why it's important to learn our larger story is that when we do face all of the challenges in our individual lives and in the lives of those we love and in the wider context of our species, our effect on this planet, sometimes it's just absolutely necessary to step into that larger perspective to give us the grounding, to give us the stability from which we can then move ahead.

MD: And one of the things that we discussed both in the audio as well as my secular sermon, *Evolution and the Revival of the Human Spirit*, is that when we get our larger story, one of the things we do is begin to value chaos and breakdowns in ways that we typically don't without understanding our larger story. So, it's vital, and if you haven't yet had time to peruse and spend some time with the resources from last week, we invite you to take the time, make the time to do that. You'll be glad you did.

CB: And also check out what others who've enrolled this course are saying on the various forum threads, and post your own.

MD: So now we'll turn to our physical instincts, and as we said before, it's our reptilian brain's hunger, the oldest part of our brain, the instincts that we have for safety, sustenance, and sex. And our intent here is to learn about our evolved quadrune brain,

our four-parted brain, with a focus this session on appreciating and managing the oldest ancestral part -- that is, our reptilian brain.

CB: And by having this evolutionary understanding of our reptilian brain, we're going to be better prepared to face head-on the challenges of having mismatched physical instincts in our world that's full of supernormal stimuli. Now, those two terms, mismatched instincts and supernormal stimuli, will be the focus of this session.

MD: There's no better way to start this conversation than with a quote from Ed Wilson, EL Wilson, from Harvard. He says, "We exist in a bizarre combination of stone age emotions, medieval beliefs, and Godlike technology."

CB: And of course what he meant by that is, it's a recipe for disaster unless we get a handle on this.

MD: Yes, indeed.

CB: Now, we can't of course change our instincts, but we can change how we relate to them, how we manage them, and in particular the context that we set up around us in which we live.

MD: And I want to say a little bit about why it's so important to understand our instincts. To understand any animal, you have to understand the millions of years of

programming that have gone into creating the mind and the feelings as well as the brain structure for how that animal behaves and thinks and acts in the world, and we humans are no different. The problem has been that we haven't had an understanding, a science-based, a knowledge-based, understanding of our instincts until very recently. And so what has traditionally been called in the west our sinful nature, or in the east overcoming our ego, all different traditions speak about the challenges of trying to live with integrity in a modern or even premodern world, and why that's the case. And only recently do we have an understanding that allows us to have gratitude for the millions of years of programming that have gone into making us exactly the way we are, and that's the missing piece, as we shared in the first introduction, the missing piece that almost no other therapy or recovery approach or spiritual tradition has, but as they integrate it, it can supercharge all different approaches. That's the missing piece, and that's what we want to focus on now a little bit in terms of how we can get to gratitude and appreciation -- that is, how we can get to an honoring relationship toward our instincts.

CB: So again, the focus here is that we have mismatched instincts, and we're living in an environment in which we're surrounded by what's called supernormal stimuli. Now, as you'll hear in the first audio clip we have with psychologist Deirdre Barrett, she did not invent the term supernormal stimuli. That term was invented in the 1930s with a couple of behavioral scientists. But Deirdre Barrett in 2010 published a book called *Supernormal Stimuli: How Primal Urges Overran Their Evolutionary Purpose*. Now, that was 2010, and before that she published a 2007 book that just looked at the challenges we have from supernormal stimuli in the realm of food, processed food, and that book

was called *Waist Land*, not the TS Eliot *Wasteland*, but *Waist Land*, and she's become one of the really important evolutionary psychologists of taking this understanding of how our brains evolved, the context in which they evolve and therefore what they adapted to, and how completely foreign, how supercharged our world is now compared to what our ancestors had to cope with, how difficult it is to say no in the kind of world we live in today.

MD: Here's one of my favorite quotes from Deirdre Barrett. She says, "the most dangerous aspect of our modern diet arises from our ability to refine food. This is the link to drug, alcohol, and tobacco addictions. Coca doesn't give South American Indians health problems when they brew or chew it, no one's ruined his life eating poppy seeds. When grapes and grains were fermented lightly and occasionally, they presented a healthy pleasure, not a hazard. Salt, fat, sugar, and starch are not harmful in their natural contexts. It's our modern ability to concentrate things -- like cocaine, heroin, alcohol, and food components -- that turns us into a menace that our bodies are hardwired to crave."

Now, you'll definitely want to listen to our interview with Deirdre Barrett -- that's the second bonus session -- and she will be joining us next Sunday, June 12th, at 11:00 Pacific, for a Question and Answer period.

CB: So, here's a clip from the conversation that Michael and I recorded with Deirdre just two weeks ago. And again, this is just a small piece of what you'll be getting in the bonus call that's also going to be posted this week.

MD: It's just a teaser.

[Begin clip of Deirdre Barrett interview]

Deirdre Barrett: I think that a lot of people think of evolution as kind of saying that you can trust your instincts, that instincts are there to show you what's adaptive, and they don't get the piece that that's only true in our original natural setting, which we're not hardly in these days. And so the concept of supernormal stimuli, the idea that there can be an artificial object that pulls instincts more strongly than the original objects for which they evolved is key to understanding everything that's gone wrong in modern society and allows our instincts to lead us astray.

CB: One of the things that I so appreciated about your book is being a woman, when I naturally think about supernormal stimuli, I think about foods, drugs, alcohol, all those kind of things that did not exist in the concentrations or mixtures of 10,000 years ago for all of our ancestors, and I tend to get a little bit smug about the tremendous internet porn problem for young and older men, and as a woman I think, that's the men, they're just falling down there. And what you did in your book which was so wonderful is, you're bringing us women up to the bar and saying, women, look at yourselves too. What do

you think is going on when you're reading all those romance novels or you have to see your soap opera every day, or you've got this insatiable urge to collect these collectible dolls and stuffed animals with the big eyes? And your book did a wonderful job of basically showing us that we're all in the same boat. We've all got one thing or another that, it may not be unacceptable to society -- that is, we women may be able to show that we're reading a romance novel when we're on the subway and a man can't pull out his *Playboy* magazine, but nonetheless, we're still there where we're having some of our energies and time diverted in a way that may not be healthy overall for us and our relations.

So, I think it's pretty obvious how the internet porn thing can become a problem, but could you talk a little bit about the female problem that I just mentioned here, and how that can turn out to be unhealthy for us, too?

DB: Well, I think that even though we're much more aware of porn as a social problem, and it's much more openly criticized, that there's a very equivalent cuteness porn, that that's essentially what stuffed animals and anime figures and the exaggerated cuteness that's not on creatures we actually need to nurture, it's on inanimate objects, and yet it's pulling our nurturing instincts very analogously to the way that porn pulls sexual instincts. And then for women, the even closer analogy is things like romance novels and soap operas as pulling the romantic interests, that clearly the instincts are there to connect us with real people, and yet this is getting diverted to reading the books that have plots that pull these instincts even more than an average, real interaction will.

It's very analogous to porn, and I think that any negative effects are similar. They're not as dire as stimuli that pull our aggressive instincts astray, or even that have us eating very toxic things, but they're mainly a time waste. And people can afford to waste a certain amount of time on stuffed animals or pornography or romance novels, but the amount of time that a lot of people spend on some of those things is probably a serious diversion of energy away from social relationships.

I think that supernormal stimuli like pornography or romance novels, they both portray such exaggerated partner characteristics that they may change people's expectations or desires in that direction, but also they're so passive that to an extent they model things, they're not realistic things, but also you're just not getting any practice with your side of social interactions. Those are effortless and passive. So then when you get on in the real world, I think you not only have this kind of fault image of what's been modeled, but also practice is much better than simple observation for learning social skills.

MD: That's a great point.

CB: One thing Deirdre that you were mentioning about how this is being brought in and what it's doing for people, Michael and I, ever since we landed on this evolutionary psychology and then got brought into the mismatched instincts, and then really February 2010 when your book *Supernormal Stimuli* came out, we felt like that was a vital piece in the puzzle we were missing. And so Michael, he normally does our outreach programs, and has this wonderful concept of how we would like to see all the

12-step programs that end in Anonymous get to the point where it's no longer shameful. It's not like this is something sinful, or something about us that shouldn't be and that's bad. Michael has a funny way of saying how he'd like to have people when they come to a 12-step program, how they'd like to introduce themselves.

MD: Yeah, after I've introduced the concept of mismatched instincts and supernormal stimuli, there's a few places where I always get laughs. For example, after I introduce supernormal stimuli, I have a picture of French fries, and I'll say, in case it's not obvious, folks, this is not food. This is a concentration of food-like items that we are evolutionarily programmed to want, and to want more of. But then I go on to say, it takes a lot of courage in our culture to walk into a group of strangers and say, my name is Michael, I'm an alcoholic, or I'm Michael, I'm a codependent or a gambling addict or a sex addict. What's true is that my name is Michael, and I'm a human being with mismatched instincts surrounded by supernormal stimuli. And you know, that's true for you too. And I pause, and everybody gets it. It's like it removes the stigma.

DB: Certainly, and some instincts are more attached to shame in society, and it is a lot easier to say I love French fries, I watch four hours of sitcoms on television. Those are not particularly adapted behaviors, but they're not terribly shame-associated behaviors. And certainly sexual instincts number one, but I think some of the other supernormal stimuli are certainly much more difficult to talk to, and more stigmatized.

[End clip]

MD: So, that was Deirdre Barrett. One of the things that she didn't cover there but is in our experience vital -- we get into it in another part in our conversation -- is that until we can appreciate why and how our instincts evolved, we'll continue to deny or resist or obsess over that which we judge or condemn in ourselves and each other. That's why appreciation is the key, the kind of appreciation that can really only come from knowledge.

CB: And the reason we appreciate is again, without those very same instincts that said, when you see food, eat it, the more food the better, eat, eat, famine's coming in the winter, you're going to need that extra fat, until we can appreciate that we would not be here were it not for those instincts, we never would've been born, our ancestors would not have survived those famines in the winter, and so anything in our brains that says if it feels good do it and do it again, and now we have all kinds of refined and drug substances that were simply unavailable to our ancestors, and so evolution never adapted us. Our brains do not know how to say know.

MD: And of course, if you just think about how human beings have related to our inherited proclivities, our unchosen nature, essentially this mismatched element, it's interesting, because prior to say 100 years ago, at least in the west there was no other way to talk about it other than our sinful nature. If people had problems with addiction of pretty much any sort, it was considered just evidence of our sinful nature. And then in the 1930s with the advent of Alcoholics Anonymous, then a whole variety of 12-step

programs and other recovery approaches to helping people deal with their inherited proclivities and their addictive nature, we started seeing the language of addiction come into being, and so millions of people have benefited from a 12-step approach to addiction.

However still, addictive language doesn't tend to get people to gratitude, doesn't get people to understand why those instincts are there. And speaking very personally, in my mid-teenage years, I discovered as soon as I started drinking my mother's scotch, I discovered that I really liked that, liked the altered state of consciousness I got. And between the time I was 17 and probably 20 or so, I hardly went a day without either smoking dope or drinking alcohol or smoking tobacco or certainly lots of caffeine as well. I'm talking 12, 15 cups of coffee a day. And the only way I could understand it was through the lens either of sin or addiction. And then in my mid-20s, I began to actually begin dealing with this fact again through these contexts of either sin or addiction, and it wasn't until about eight years ago that I really came to an understanding -- I've been involved in 12-step work since the late '80s. 1989 was when I went to my first 12-step meeting. But something profound happened at a deep emotional level when I really got that my instincts make total sense from an evolutionary perspective, that of course I like pleasurable feelings and I want to have pleasurable feelings and I sometimes have struggled over the course of my life in not indulging in pleasurable experiences. Of course I thought sexy thoughts when I saw an attractive woman. These things became so understandable that I could begin to chuckle and have lightness and a certain playfulness which paradoxically allowed me to be in integrity and to stay in integrity and

to support others in being in integrity from a far more generous, lighthearted strength. It was a lighthearted strength. It wasn't serious, it wasn't effortful. It became really easy when I had an evolutionary appreciation of my instincts.

And that's where I think this perspective of mismatched instincts in a world of supernormal stimuli can supercharge anybody's life who's dealing with any kind of habit pattern that doesn't serve you, because if you can recognize, of course I find this addictive, of course I find this pleasurable, of course I like to eat this or that or watch this, or whatever it may be, when we can have gratitude, recognizing that we wouldn't even be alive in our ancestors didn't have those very same instincts, the step from that to making positive choices and to honoring our instincts becomes much easier. For example, one way that for many years I honored my instincts was that my kids were only allowed, and we as a family only indulged ourselves in supernormal stimuli -- we didn't call it that back then -- in pleasurable things at new and full moons. Or in some cases, there was actually a number of years that the only time I would allow myself alcohol in any shape was four times a year, at the solstices and equinoxes. In other words, that was an attempt to keep it at a pace that allowed me to honor the instinct without it becoming problematic. Now, it turned out that with regard to drugs and alcoholic, I ultimately found that it worked better in my life to not have it at all.

CB: Now, we'll be continuing in week three as well with the mismatch and instincts, but at that time we're going to turn to the social, relational instincts. So there are some overlaps of course in the sexual lust instinct and the romantic attraction and bonding

attachment instincts, but we're going to hold off on those relational components until week three. This week we're dealing with the physical instincts that were the very same instincts that when our ancestors were still reptiles -- this is before the dinosaur era. Mammals evolved in the early dinosaur era, but our ancestors prior to the evolution of mammals were reptiles, and they did what all reptiles do. They have instincts for safety, they have instincts for sustenance -- find food, try not to be food -- and they have instincts for sex. They do not have instincts for, with the exception of a few reptiles such as crocodiles and pythons, females, there weren't any instincts for nurturing in our reptilian ancestors, and there certainly weren't any instincts for romantic attraction. It was basically lust, sex, copulate, it's over.

MD: And those of you that may remember on the website, one of the things that was mentioned that we would be talking about this week but we actually won't be, we'll be talking about it next week, is to learn the one practice vital for maintaining a fabulous sex life, even if you have the same partner for decades. So, you'll have to wait another week for that.

CB: And codependence will also come up next week too, and one of the things that I have found most useful from an evolutionary understanding, having done codependence work myself, is that once I learned about our evolutionary heritage, I really saw the distinctions between 12-step program needs for people dealing with physical addictions versus the different 12-step program or any other recovery program needs for those of us who are not dealing with addictions in ourselves, but dealing with

the problems to us of addictions within our loved ones. And that codependence is not part of the reptilian, it's entirely an old mammalian, an emotional brain component, very different. And again, this is a way that the evolutionary understanding I think can really be of assistance to the current recovery programs.

MD: Over the years, Connie and I have attempted in a variety of ways to help people of all different ages -- even young first, second, and third graders as well as adults of all different backgrounds and traditions -- to get our brain's creation story in their bones, to feel it, understand it, to have a breakthrough and appreciation. And one of the things we've found is that it really helps to have both a visual as well as an auditory component. If we just say something, people typically don't get it as deeply as when they can both see and hear something. So one of the main resources we're going to invite you to take the time to actually watch and experience is me delivering in a video, visual form our brain's creation story, the different parts of our brain, what they do, I'll also be telling stories. It's the main evening program that I've been delivering now for a couple years, and it will help you to have both the visual as well as the auditory component.

CB: And that program, Michael's been using the title Evolutionize Your Life for two years. And so for the resources that are integral to this week's session, there'll be a webpage in which you'll be able to find as you scroll down Michael's program Evolutionize Your Life, and it's part one, the first half hour of that longer, about an hour and 15 minute program. But, it's the first part, where visually you'll be able to see what

the quadrune brain is, which just very briefly has the components. The oldest component, when our ancestors were still reptiles, is this reptilian brain that's the focus today of the physical instincts. Next to evolve was the old mammalian brain, the paleo-mammalian brain. That's the emotional, nurturing, bonding instincts. Up after that in our primate ancestors -- that is the monkeys and the apes -- came the rational figuring out neocortex which is our interpretive instincts. Now the neocortex early on was considered to be a whole system, but within the last 12 or 15 years, the part of the neocortex that's exactly right behind our forehead -- the kind of things you see in alien movies where the aliens would get smarter, it's this part of the forehead that comes lumping out -- that's called the prefrontal cortex, and that's the fourth part of our evolved brain. That's the advanced part. You do find it in the primates, but it's overwhelmingly huge in us humans. And that's the executive function of the brain, and it's really the only place where we can find impulse control.

MD: And it's also the seat of all of what we call spirituality -- our understanding of ultimate reality and how we relate to reality and spiritual practices and all that kind of stuff is grounded in that part of the brain as well, the prefrontal cortex.

CB: And what you'll be learning in Michael's video, *Evolutionize Your Life*, the half hour program we're directing you to basically have that be the first thing you go to, you're going to find that Michael and I have invented some rather playful names for these four parts. We're not going to mention them here. We want you to get it in a fun way through that video. But I would like to say that one of the ways where it's easy to

remember is that not only did these four parts of our brain evolve in sequence over about 400 million years of our ancestry, but that very same sequence is mirrored in the gestation of an embryo and a fetus within the human womb. That is, the reptilian brain first develops in the first trimester, the old mammalian brain, the nurturing part of the brain, the emotional brain, develops during the second trimester. The neocortex, the rational, thinking part of the brain, the conscious part of our brain develops during the third trimester. And what about that prefrontal cortex, Michael, when does that develop?

MD: the prefrontal cortex actually doesn't fully develop until between the age of 23-25. It obviously begins developing very early on, but it doesn't fully develop until the age of 23-25.

CB: So, if there's one thing that I do not say yes to the universe about, it's the mismatch in our modern society of how soon puberty happens. Puberty happens now for girls around age 11 or 12 or so. Each generation it's ramped up. Back only a few generations ago, most girls did not reach puberty until sometime between 16 or 17 or 18 years old, and by then many of them got married. But what we have today, we have a delay in how much education and job preparation we have to get in people's brains, how much experience they need to have in this society to learn how to live with one another, to get to the point where they can responsibly raise children. So, what we find is that we have physically mature individuals with boys with the most testosterone, sex drive, risk-taking instincts, very little experience, and added onto that, a prefrontal cortex that is not yet matured.

MD: And part of what the prefrontal cortex is about is good or poor judgment. Some of the problems that we see in our youth stem from exactly that.

CB: So, we're going to be visiting the structures of the quadrune brain and the practical implications of this evolutionary understanding for helping us with our challenges and our loved ones with challenges on a week by week basis. This week the reptilian, as well as an overall understanding, we'll give you in the resources the overall understanding of this quadrune four-part brain. And then next week the emotional brain, the week after that the rational brain, and then finally the prefrontal cortex.

MD: Which is really the cocreative cooperative instincts.

CB: So for the resources, you'll primarily be sent to a single webpage that I've crated on TheGreatStory.org website, and it's called Your Brain's Creation Story. And this is where I send everybody in this course, outside this course. This is where we try to compile not only our resources, what Michael and I have generated over the years, but we also include embedded videos and text of some of the best resources that others have brought to this understanding. So, as you first enter that page, you're going to see a clip of Cosmos, Carl Sagan. You're also going to see some Deirdre Barrett quotes, some of the other great quotes on there. And as you scroll down, you'll get to the video Evolutionize Your Life, and again, primarily start right there.

MD: And it's just the first half hour of that four-part story.

CB: You can leave the rest until later on in the course. So, the second thing that Michael and I would like to have you experience is an audio of a half hour program that I gave called Your Brain's Creation Story. It is audio, but once you get the video part of Michael's, you'll be able to see how I explore in more depth problems with food, with romance, with supernormal stimuli. And I did this before a live audience, so you'll be able to see the emotional reaction that the audience and I are having, and you'll get part of my story too.

MD: So again, there's a lot that'll be on that page. Follow your heart, watch and read, whatever you want, but the two things we request that each one of you take the time, make the time for, are part one of my Evolutionize Your Life program, which is visual, and then Connie's audio, Your Brain's Creation Story.

Now as we mentioned last time, where this really becomes life-changing for people is not just watching things or reading things or listening to things. That can only go so far. It's really the practices, the experiential exercises that can make the difference. So, there are two exercises that we request that each of you do, we will also be doing. The first is related to what we hope you'll begin cocreating, which is a gratitude journal. One of the things that psychological research has now shown is that there are few things more powerful and transforming on a day by day, week by week basis than just keeping a journal of what you can be grateful for to begin filtering for, here's what's real. What

can I appreciate about this situation, this day, this week, to focus on that and write that down. So, in your gratitude journal, what we'll be inviting you to do is a little two part exercise around your survival and reproductive instincts, and to write that stuff down, either pen and paper or on your computer, but to actually write that down.

The second exercise is related to integrity circles, and you'll see I have sort of an outline of what I mean by integrity circles. But we invite you to actually take the time to write out your own three part integrity circle -- what's in your red, yellow, and green circle, and that will all be made obvious in what you read about that.

And with respect to sharing, because this is personal stuff, you're most likely not going to want to share this with too many people. We would encourage with, in fact do encourage you, to have at least one person, one trusted friend that you can share this with. But in the community forum, just share what it was like for you to go through this experience. You don't have to share the details of what you actually wrote down unless you want to, but certainly share what it was like to do exercise done in terms of looking at your reptilian instincts for survival and reproduction through the lens of how they serve your ancestors and how they serve your life, and then also with regards to your integrity circles, to share what it was like in creating that. I'll do the same.

CB: And with just the people who already with session one have started sharing in the introductions and on the various forum threads, I'm aware that there's one person who's already been willing to be open that she has benefited from a 12-step group.

There's another person who mentions that her work is as an addictions counselor for women. So, to the extent that people have experience either vocationally in helping people with addictions or in recovery circles themselves, Michael and I would be very interested in hearing whether for you or with the clients you work with you think that this evolutionary perspective, this perspective that makes it possible to not stigmatize but first appreciate why we find these cravings so overwhelming, and why being in an environment of supernormal stimuli can trip us up so easily, we'd be interested in hearing whether you think this might have benefit for you and for others.

MD: Another aspect of our reptilian brain that's fascinating that many people have never thought about is that that's where, it's this most ancient part of our brain that's the part of us that resonates and is grounded in ritual. What I mean by ritual is simply patterned behavior that just feels right. It's one of the reasons why when we do ritual, even whether we believe it literally or not -- there's many people for example that no longer have otherworldly unnatural beliefs, but they still find whatever religious rituals they grew up with as a kid or were part of their formative years, they still find them meaningful. Many people do. And rituals aren't just like that, either. It's like going to bed at a certain time and reading a book before bed, or a certain way of waking up, or maybe you take a walk in the afternoon like Connie and I do at sunset, or whatever patterned behavior that you have around anything -- waking, retiring, making love, communicating, your physical body, whatever nurtures you, music, arts, any sort -- but any kind of patterned behavior that nourishes your soul, that nourishes you in a deep place, that's grounded in the reptilian part of the brain. And we know that animals have

patterned behavior that just feels right. They just keep repeating it. It's over and over again, it nourishes some deep part of them.

And so, that's one of the reasons why it's useful to give some attention, to actually focus our mind on, what are the patterned behaviors in my life that just feel right, and do those patterns serve me and the people I'm in relationship with? Because sometimes, we get into patterns of behavior that feel right, so we're led to do them over and over again, but when we're honest about it, we don't see that they serve us, and that's where we can make some changes by simply coming to appreciate without making wrong, without beating ourselves, without feeling guilty and ashamed, we can just notice, and then there's some tools that we'll talk about in the following weeks in terms of how to begin to develop healthy habits to replace the unhealthy ones simply by finding patterned behavior that feels right that also nourishes us and our relationships.

CB: There's also patterned sensory experience, and the beat of music is a great example of that. One of the things that's fascinating is that it's the deep bass, the woofers, the drum, that has that power that we actually feel it coming through our chest. That's stimulating the reptilian part of the brain, it's not stimulating the higher levels. And the thing that's fascinating about that is that that reptilian part stimulated so by deep bass drumming music or a drumming circle can be enlivening. It can give it a sense of life, and it can also enhance the sex drive, or if we're in a situation where there's a territorial concern going on, it can bring out the territorial aggression in our reptilian

ancestry that evolved before our mammalian ancestry. So, that side of music is very potent.

So taking on an evolutionary perspective to the kinds of physical instincts that can be attributed to the reptilian part of our brain, what can go wrong? What can go wrong if someone learns, gains this understanding? Well, a lot of people fear that loved ones who may be involved in addictions will just say, it's in my genes, and they'll use it as an excuse and they won't work towards recovery. In Michael's and my experience, we haven't known anyone who went down that path from a real understanding of this.

Now what can go right? Lots. One of the main things that can go right is helping people get out of denial faster, and it's because we can say to them, it's not your fault, but it is your responsibility. Another way of saying it is getting into right relationship with our dopamine receptors. What you'll learn in various of the resources on the webpage is the role that the dopamine receptors play in all of the physical stimulants that can lead to addiction. What also can go right is that we come to realize that dopamine is also generated through intense physical exercise, through dance, through anticipating a fun event, through expressing creativity, getting into flow, pride in cooking or eating a great meal. There's lots of very healthy and socially acceptable ways of getting the dopamine hits that bring us the joys in life, so that's what can go right.

MD: Another thing that can go profoundly right, and you'll notice this in the write-up that accompanies the exercises, is that we now have a wealth of evidence in terms of

what keeps people stuck in patterns of behavior that don't serve them, what keeps people stuck in addictions, and what frees them to make wiser choices, to have healthier habits around their behavior and actions and thinking. And I talk about what I call the DNA of big integrity -- that is, the four essential components, the four things that seem to be absolutely crucial for gaining freedom around trouble patterns of whatever we do or consume or think that's unhealthy for us. And the four things are trust or humility, an openhearted, open-handed stance toward reality, toward the universe, toward life, toward God is you like theological language -- authenticity, being authentic, being real -- responsibility, not playing the blame game but being responsible for our wake -- and then being of service to something larger than yourself. And those four, trust, authenticity, responsibility, and service, they're at the heart of virtually every program that helps people have a great life. I would go so far as to argue that you can't experience life to its fullest if you're full of pride rather than humility, or if you have fear rather than trust, or if you're being inauthentic, not really expressing, not really saying or doing what's true for you, or where you're playing the blame game and not being responsible for your life, judging something outside of you for your life being the way that it is, or where you're only trying to serve your own needs, but not serving something larger than yourself.

And so you'll see the description there. And of course for those people that have had any experience in the 12-step programs, that's really all the 12 steps are, 12 steps that get people to consistently having humility, authenticity, responsibility, and service.

CB: So in winding down this session, Michael and I would like to recite for you here the seven outcomes that we have posted on the session two module. Again, these are the things that we're hoping that you'll get at least a taste of the possibility for, because these are the very things that for a number of years we've been taking in and experiencing and embodying this evolutionary perspective of our brain's creation story. These are the things that we ourselves have benefitted from this perspective.

MD: And what we've seen transform other people's lives as well.

CB: Absolutely. So the first one, ascent. I accept that I and others have deep ancestral instincts that are mismatched with the demands and temptations of the modern world.

MD: Appreciation. I'm grateful for my physical instincts. I wouldn't be alive today if my ancestors did not have these very same drives for sex, safety, and sustenance.

CB: Honor. I choose to regulate my exposure to supernormal stimuli in ways that honor my physical instincts, and were necessary to put in place systems of support.

MD: Witness. I notice when an ancestral urge is tempting me to slip in my commitments and responsibilities to myself and others. I do not make the urge wrong, yet I know I am responsible for my actions.

CB: Compassion within safe boundaries. I have compassion for myself and others while maintaining safe boundaries.

MD: Joy. My choice to manage my physical urges and the supernormal stimuli in my environment will not diminish the joy I experience in the sensory blessings of life.

CB: Societal benefit. I'm keenly aware of the societal costs of mismatched instincts in our modern world of supernormal stimuli, and I will act in accordance with this understanding.

MD: I'd like to close with the words of someone who was powerfully affected by this understanding who sent us an email. He said, "An evolutionary worldview helps me control the obsolete urges of our evolutionary past. Understanding evolution transforms the drives of hatred, fear, unhealthy lust, overeating, excessive alcohol use, and others from being demonic temptations into understandable, controllable influences. Understanding evolution robs them of much of their power by dragging them into the light where they can be openly discussed and controlled. If I had to leave them in their dark lairs, they could much more easily take control of my actions."

CB: That's it for session two. This is Connie Barlow.

MD: And Michael Dowd.