



# THE SCIENCE OF ENERGY HEALING

## TRANSCRIPT

### Invisible Biology: An Introduction to Quantum Biophysics | Part 2

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Bruce: When we look at atoms we have to look at them in a different form. Atoms have charges in them—the energy vortices that are present in the atom and all atoms are spinning like those tornadoes. Let's start with this very simple fact. Every atom is electrically neutral for the simple reason every atom has an equal number of positive protons as it has negative electrons. Why they are equal positive and negative, of course there's no net charge. What's really interesting is, while there's no net charge to an atom, the electrical charges within an atom are not equally distributed.

For example, in the model illustrated in this slide you can see there's an electron on the right-hand side. The significance about that is since an electron is a negative charge, if I bring a volt meter to the right-hand side of that atom I would have a more negative charge on the volt meter. If I take the same volt meter and move it to the left hand side of the atom I'd have a more positive charge. But what's the result? The negative charge on the right side and the positive charge on the left side come together and the atom is still neutral.

I can move a volt meter around the atom and in doing that read the positive and negative charges. But a more interesting understanding is this: all atoms spin like tornadoes. The significance is, as you see in this video, there's an atom and it's negative on the right side, positive on the left side. I say, "Okay, now let's put it into the spin mode." As the atom is spinning around, one side is more positive and one side is more negative. It's rotating around so the positive red, the negative blue. I put a volt meter and I say, "Look at the volt meter. It's going back positive and negative."

I say, "Let's get a read out of that volt meter." **As you get the read out of the volt meter you start to see the characteristics of what? Waves. That an atom is generating**

**waves. An atom is an energy generator. In this process the waves that you see are like ripples of energy in the field. An atom is broadcasting energy. An atom can be characterized as waves. We were focusing before in a Newtonian perception as particles, but in the quantum physics world an atom is not just a particle, an atom is creating waves around it. Why? It's a spinning vortex of energy.**

If you put the volt meter outside you can read those waves or I can show it to you in an illustration such as this. In the center is an atom. I go, "But wait, even the center part with the nucleus, that's still energy vortices so that doesn't really look like that." An atom actually looks like this, there is no physical character of the atom. It is a spinning vortex of

energy. All of a sudden we say, "Oh my goodness. Everything that's made out of atoms is also giving off energy." I go, "Absolutely true." Here's an article from *Scientific American* that reveals that.

I'm not interested in the title, I'm interested in the subtitle. The subtitle states, "**Every atom or molecule emits and absorbs light of characteristic wavelengths.**" **The point is we are made out of atoms and molecules. Fact: our bodies by definition are emitting light and absorbing light.** Yes. We are emitting light because all of our atoms are generating energy fields which are radiating out from us. Everything that's made out of matter is also radiating energy fields. This is not a new understanding. The Asians have a dealing with Feng Shui for a thousand years here.

What's the relevance of that? They put physical things in certain crystalline like structures to control the energy in a field. That's what Feng Shui is. Moving physical things as physical elements, but using them in regard to what they radiate in terms of energy because all physical things radiate energy. If you go back to the old days in chemistry and you had a chemistry textbook, somewhere in that book there's a colored picture of the spectrum of emission and absorption. As illustrated in this example right here, you can see that the elements listed on the left side of the chart (hydrogen, helium, mercury and uranium) are compared in regard to light that they emit. You say, "What you do mean light that they emit?"

Remember atoms are generators. As they are spinning they are giving off that energy and some of it is in the range of light. We find that, "Yeah, but the light given off by an atom has unique vibrational frequencies." And I go, "Unique? Yeah, color is vibrational frequency. Different ones, different colors." When you look at the energy frequencies given off by the spectrum of emission of these elements, you can see that each element has a unique set of colors, which by definition is translated as a unique set of vibrations. It's interesting because you can determine the elements by the light coming off.

So I say, "Yes, I can't go to a star but I can tell you what a star is made out of." You say, "How can you tell me that?" I go, "By analyzing the light spectrum coming from the star and comparing it to the spectrum of emissions by atoms, you can identify which atoms are making up the composition of the star." Physical matter (atoms in the star) are actually being translated energy waves that we see as light. You say, "Well, that's pretty interesting." Here's something more interesting. Look at those patterns on this absorption spectrum picture and then look at this. What is this? This is a uniform product code. What does it mean?

It means this: Those bars, when read by a scanner, turn into sounds. So the narrower the bar there's a different frequency than the width of the bar and duration is the spacing. If

you do a sound assessment by scanning across that and making the sounds, you'll find what, it's a vibration. I go, "Yes." Every UPC has a vibration. What's relevant about that? Everything in our world can be given an identity as a unique vibration. I go, "Absolutely." And it started with the atoms. Atoms have unique vibrations. That's what emission spectrum is all about. Vibration is a form of information—signaling.

When I show you this picture of a breast, I would say, “Is this a photograph of a breast?” The answer is, “Absolutely not, this is a breast scan.” It’s scanning energy of a breast. It’s not a physical photograph. What can you learn by scanning the energy? **And the answer simply this: every atom gives off a unique spectrum of energy. If you can read the energy spectrum coming off a structure like this breast right here, then you’re going to identify atoms that are making up the breast.** Just as much as I said, “What atoms are making up a star?” This is another look at the same thing. What atoms, what molecules, what cells are making up a breast?

Each atom, each molecule or each cell has a unique vibrational frequency because everything made out of matter is vibration. Therefore, when I look at this breast scan what you can see in the center of the scan is a cancer. How can I tell it’s a cancer? The vibrational frequency of cancer cells is different than that of normal cells. What’s interesting about this is that this breast scan can identify a cancer by the characteristic vibration of a cancer. We go back to our world of understanding Newtonian physics and chemistry where our perception of atoms are like these billiard balls. In Newtonian physics two billiard balls come together, boom, an explosion and creation of chemistry occurs.

I go, “Oh, atoms hit each other and create chemistry in Newtonian physics. What about quantum physics?” Well, let’s look at the same particles in quantum physics and now we start to see they’re mainly waves. Then if I say, “Get rid of that element of a nucleus in the center,” and I get rid of that, then what you see are two sets of ripples converging on each other. When atoms interact they’re not physical interactions, it’s the interaction of the energy waves that are given off by the atoms. The energy, the ripples of one atom are moving out into the field where all the energy is, and the ripples of another atom are moving into the field.

If you bring these energy sources close together then the ripples interact in a very specific way. We call this interaction interference. It’s also called super position. That means two waves coming together but they could be at the same place, so wave A and wave B are at the same place and that’s called an interference. So what are we looking at here? We’re looking at atoms interacting. I say, “Yeah, but it’s not physical is it?” No, it’s the energy vibrations that interact, not the physical atoms. We call all these vibrations that create the world in which we live, the collective nature. Physicists called this ‘the field’.

By definition, field is an aquarium of energy vibrations in which we live. Although they’re invisible, they’re all around us. In this room right now where television broadcast, cellphone broadcast, radio broadcast, even solar energy is passing through this room. I am in the midst of an energy field. **Now, the interesting part about it is... there’s a wonderful quote by Albert Einstein, and this is from an understanding of fundamental quantum physics and he says, “The field is the sole governing agency of the particle.” Let’s understand this particle means matter. Let’s read it again, “The field (the energy, the invisible energy) is the sole governing agency of the particle (matter).”**

Now, all of a sudden this becomes profound because in the world of quantum physics, that invisible realm of energy, is ignored and neglected by Newtonian physicists. But in the quantum physics world, not only can you not ignore it, but you must also recognize this: it is more powerful in controlling the physical world than is the physical world. So we've left out the big piece of the equation in conventional science. We talked about interference, waves interacting. Well, look, here's a picture of two ripples on a pond caused by two rocks dropped in the pond at the same time and the ripples are converging on each other.

The ripples are moving through the water and as they move they become entangled. The ripples from the energy of the rock on the left and the ripples derived from the energy from the rock on the right move toward each other and then overlap—there's an interference and the energy of one becomes entangled with the energy of the other. What's the consequence of that? Well, let's illustrate it physically with a schematic. As you see on the left side of the screen is wave A in red and on the right hand side is wave B in green. What do they represent?

Two rocks exactly the same size held exactly the same height above the water and dropped exactly the same time into the water. The ripples from each rock start coming toward each other up and down, up and down and then they entangle. What is the consequence of entanglement or super position, in this case, when the waves overlap one another? Well, you add the value of the overlapping waves. Simply and schematically look at this way: wave A and wave B are coming toward to each other where they interfere and overlap. "I just overlap the two waves. But to know what goes on here, add up the values of the waves.

You can see plus one of the red and plus one of the green overlapping each other means that the wave is valued at two. Minus one in the red, minus one in the green means when you add those two waves together you're at a minus two. So what would be the result now of the two waves coming together? As you see in C, as they come together, the two waves entangle and in this entanglement they enhance each other so that the power of the waves where they join is greater than the power of the waves on either side. And you ask, "What do you mean the power?" I go, "Well, the height of the ripples, the height of the waves is power."

Simple. You drop a small pebble into the rock you get little tiny waves and you drop a big rock into the water you get these big ripples like that. The height of the ripples, small rock or big rock, is based on the amount of energy. The more energy you have the higher the ripples. What happens when two waves that are in harmony with each other (meaning both waves are going up and down at the same time) ...What happens when two waves in harmony come together? They interfere with each other, but it's called **constructive interference. That means additive interference and that the power of the combined waves are greater than the power of the individual waves coming together.**

Another way of expressing this is the way that people actually feel it. When people, who are energy beings such as each one of us, finds our self in an environment where the energy is in harmony with us, we feel more energy in our lives. We call it good vibes. Good vibes mean the energy is coming together. Whatever's surrounding you—people,

objects, Feng Shui, whatever. The objects around you add their harmony energy with your harmony energy and the two harmonies called harmonic resonance come together and the energy is enhanced. As you walk into a place where people are in harmony with you, you can feel it and it's called good vibes and that's really cool.

But I want to show you another form of entanglement—the complete opposite. The picture almost looks the same when you look at it. Here wave A and wave B again but here's what's different about it. In this experiment the rock in wave A is dropped before the rock in wave B. Relevance? The waves are not in harmony. The ripple on wave A is going up, the ripple on wave B is going down. As wave A goes down, B goes up. They're out of phase, they're not in harmony. Let me show it to you because we can still get the same result by looking at the overlap.

As you see them going across the screen you can see they're out of harmony. At the middle point overlap, add up the waves and then you see what you get. The red wave is minus one, the green wave is plus one. Add those together—zero. You can see the height of the red wave is plus one, the depth of the green wave is minus one, add them together—zero. What is the consequence of this kind of interference? They're out of phase, they come together and boom, flat line. Flat line means no energy. I say, "Wait a minute, entanglement can lead to interference."

**One form of entanglement leads to an enhancing of the power so that's constructive interference. But waves that are not in harmony with each other, that are out of resonance with each other, can come together and cancel each other. That's interference, but it's called destructive interference.** Two energies can come together and cancel each other out.

You personally have had that experience in your life as well. You, being an energy body, found yourself in a place where the energy just did not conform, it wasn't in harmony with you. You find yourself at a dark part of a city and you seem lost and all of a sudden you feel weak, your energy is going weak... Why should you feel weak? Because you're losing power and I say, "How did you do that?" The answer is, "Because the energy around you is not in phase and harmony with you and when they come together it's called destructive interference, which you now feel as bad vibes meaning you've lost your power."

**What's the point? Energy can come together and enhance two things or energy can come together and cancel two things. Energy can fully influence matter.**

Now, in this picture of a family in silhouette form, we can focus on the physical bodies of each. But consider this... let's get out of the visual range and start to recognize that we're actually electromagnetic fields. If you could see them with electromagnetic readers, what would this family look like? And it would look something like this. What you can see is that every object, every person, every pet, everything, like Feng Shui, is giving off energy and waves but the waves start to entangle with each other. In a family, for example, there's no individual in the family that's not connected to the rest of the family because other members in the family are in the same sphere and are influencing each other with their own individual wave-like activity.

So guess what? Your health and your activities in biology are not just controlled by you, but they're also controlled by the energy fields around you. This becomes very important when trying to understand the nature of health. People can become entangled and their

energies can lead to good vibes or bad vibes which then can tell you the relation this has in your health. Good vibes=more energy, more life, more health. Bad vibes=less energy, dis-empowerment—you're moving toward death and that's why organisms read vibes as the primary to communication. Why?

If they move towards something that enhances their life they can feel the energy and go, "Good." If they're moving towards something that threatens their life, they can feel the energy go away—bad vibes. All of a sudden they're controlling their life by reading their energy. How or why does this occur? The answer is very simple: energy is life—the more you have, the more life you have; the less you have, the less life you will experience. Therefore, good vibes means you're going toward more energy and health; bad vibes is you're going away from it.

Now, I'm going to show you a very simple experiment. It's nothing major in the world of bio medicine but it's very instructive nonetheless and here's the experiment. I take a piece of iron in a file and I file that piece of iron and I got a pile of iron dust called iron filings. I stick those iron filing into a salt shaker, sprinkle them on a piece paper and look what happens. I get a random pile of iron filings as illustrated in this picture. If I throw this pile away and sprinkle again, I get another similar random pile of iron filings. Every time I do it, it's random.

But this time I change the experiment a little bit because this time I buy a magnet and I stick this magnet underneath the piece of paper. Now, when I sprinkle the iron filings, look what I get. This beautiful structural array of the iron filings and you go, "Yes, that's a reflection of that magnetic field that's invisible." I go, "Yeah." Here's what the point is: iron filings without an energy field are randomly distributed. But iron filings in, in this case a magnetic field, become totally organized.

The structure that you see in this field is due to, not just the iron filings, the structure is due to the matter, the iron filings *plus* the field (the invisible forces) and together the field shapes the matter into structure. Again, this is a very important insight. For example, consider instead of iron filings... let's say these iron filings are cells and what you're looking at is a cancer. Then you say, "Well, what causes the cancer?" The tendency that we've always had is, in reductionistic biology, to take the cancer cells apart and see what you can find and you come up with something called the cancer gene. I go, "Does the cancer gene cause cancer?" The answer is, "No." And you say, "What do you mean, no?"

For example, the BRCA1 gene, the breast cancer gene... does everybody that has this cancer gene get cancer? No. 50% of the women have the cancer gene and 50% don't. All of a sudden you say, "Well, wait a minute. You said it was a cancer gene. I should have gotten cancer." I go, "It's a gene that might predispose you toward cancer, but having the gene does not cause cancer." What causes the cancer? The energy field around it is shaping the cancer. So trying to kill the cancer cell doesn't really get at the source of what the cancer is.

The cancer is a physical structure that is altered by a field that is not in harmony and, as a result, when you change the fields is when you change the cancer. Let's go back to

Einstein's quote, "The field is the governing agency of the particle." The field, in this case, is the governing agency of the cancer. The gene? No, no. The gene, just as the physical characteristics of a body... but it's the energy environment around that body that will determine whether that cancer will express itself. The gene did not do it, okay? We now recognize that this energy field is what's governing the structure of matter. Through what? Entanglement.

When you start to change the energy field, you change the structure of the matter and I go, "Well, then in this case there must be some literature somewhere that shows that

energy fields have a profound effect on matter... and this is the great part. These scientific papers have been in the literature for a hundred years and you go, "Yeah, but I never read about them." I say, "Yes, for a very simple reason: Medicine, based on classical physics as I already showed you, said that a signal must be in the form of chemistry, a drug—otherwise forget about it."

That's why if I'm a conventional medical practitioner and you show me an energy healing thing, I'm not interested. Why? Because my classical vision says, "Ignore the energy, focus on matter." And number two, and as importantly, why don't we see so much energy research in the field? The answer is it's not in the interest of the pharmaceutical industry. They sell chemistry, simple fact. If energy could be put in a capsule then the pharmaceutical companies would be selling that energy right now. Since you can't unitize and sell it as capsule form, it has no relevance to the profit making machine called the pharmaceutical industry.

In this slide I just want to show you some pictures of title pages of reports that are the typical ones found in major journals like *Science* and *Nature* and *Cell Biology*. These are not off stream journals, these are mainstream journals so let's look at the first one. "Time Varying Magnetic Fields: Effect on DNA Synthesis," "Pulsing Electromagnetic Fields Induce [Cellular Transcription] RNA Synthesis," "Exposure of Salivary Gland Cells to Low Frequency Electromagnetic Fields Alters Polypeptide [protein] Synthesis."

The major syntheses that cells can do—DNA, RNA and protein are all regulatable by electromagnetic vibrations. But more than that, aspects of cells can also be changed. "Endothelial Cells Respond to Electromagnetic Fields by Creating Blood Vessels." In other words, energy fields can shape endothelial cells using a process referred to as differentiation or morphogenesis to give rise to a structure. An energy field can be the signal to create a blood vessel or an eye or any other structure at this point.

"Effect of Extremely-Low-Frequency Pulsed Magnetic Fields on the Mitogenic Response of Peripheral Blood Cells," that's cell division, mitosis, yes. I can control cell division with electromagnetic vibrations. I can also show you hormone release from endocrine glands can be activated by electromagnetic vibrations. The growth of nerve cells can be influenced by electromagnetic vibrations, even the release of a neurotransmitter between a nerve and a muscle cell can be activated by electromagnetic vibrations. Every aspect of biology is controlled by energy fields, but it's not in the literature or understanding of allopathic medicine by exclusion. It doesn't mean it doesn't exist, it's just not in their field.

We go back now to their field of classical physics and I say, "Listen, the shape change of molecules (which we mentioned earlier) is what is responsible for life." A protein change of shape, the movement is used to do a function and that's where life comes from. Now, in trying to understand the protein shape of a molecule and how that shape changes in response to signals, you have to go back to physics. In this paper, which I love because it's a typical science paper like the church writing the title in Latin so you have no idea what the heck this paper is all about. What is it? "Hyperconjugation not steric repulsion leads to the staggered structure of ethane."

You go, "What's that?" I go, "Simple, an ethane molecule can twist from shape A into shape B and therefore changes its shape in response to a signal." That's really cool, but why is it important? Because protein is still the same shape twisting. But why is that important? Because if you can predict the shape changes between form A and form B (the shape change in the conformational change), if I can predict the movements of that conformational change, then I can predict the mechanisms responsible for it.

Why is this important? Because in studying the shape change of ethane, Pophristic and Goodman used all the principles in Newtonian physics to try to predict the intermediate stages and were not able to do so. Point: the movement of the protein did not respond to the mechanisms in classical Newtonian physics. However, when they assess that movement using the principles of quantum mechanics they were accurately able to predict the movement of that molecule... and what's the point? It's quantum mechanics that are moving the molecules, not Newtonian physics. That means our belief system about what controls life is important. Why? Because the signals control life.

Yeah, but the signals controlling life, are they coming from the Newtonian or quantum world? Newtonian world—then they're physical signal such as drugs, whereas the quantum signals come from energy fields. Now we know Pophristic and Goodman it's the energy signals of a quantum field that are influencing the shape of an ethane molecule. The significance is that when this paper was published in *Nature* there was an editorial in the same edition by Frank Weinhold, a physical chemist. And what did Weinhold write? He wrote "A new twist on molecular shape."

Really what's important is to read the subtitle of his article: "What are the forces that control the twisting and folding of molecules into complex shapes?" Wonderful question. Why is this question important? Because it's the twisting and folding of molecules in complex shapes where life comes from. His answer to his question is, "Don't look for the answers in your organic chemistry text book." What's the relevance of that? Organic chemistry provides the mechanistic foundation of allopathic medicine.

**What this article is saying is if you want to understand the shape changes which are how life occurs, then don't look for the answers in your organic chemistry book. Which means then the beliefs generated by that organic chemistry textbook model are incorrect and this is causing a lot of problems in the healthcare industry.** What we must start to recognize now is there's a concept that says that life and movement of the molecules of life are not based on materialism, that's out of here. It's based on energetics. So we have a new view. Now, energetics have been shown to control cells, yes, and chemistry has been shown to control cells—that's true as well.

The question is, which of these forms of signaling is more effective or more desired by the cell as a form of communication? The answer is simply this: the most efficient and

fastest form of communication would be chosen by a cell because that would give it the advantage of staying alive, being aware. The more you're aware the more you can stay alive. CWF McClare from the University of London, a biophysicist, asked that question in the physics manner of creating the equation.

Is a resonant machine, which means vibrational machine, more effective in signaling than what's called a thermo-chemical machine? (That's where chemicals come together and pass signals on.) If you remember in your days in chemistry in school, you would hold a test tube, put a chemical reaction and you feel heat come out—that's why it's called a thermo chemical reaction. The heat is given off during the chemical reaction. Well, that's interesting, but what is heat? Heat is wasted energy. So I put a signal molecule into a test tube for a receiving molecule. The signal molecule and receiving molecule will come together and the first thing they do is give off heat.

**If the signal molecule is carrying a signal and the signal is involved with energy, then it turns out 98% to 99% of the available energy of the signal is dissipated, wasted as heat. So a chemical signal is roughly 1% or 2% efficient compared to a resonant vibrational signature, which is nearly 100% efficient.** Basically, vibration is a much more effective way, much more efficient, in communicating than is chemistry.

In regard to speed, if it's a chemical moving through a solution to activate another molecule (just as a joke to say a chemical can defuse—move through the water, let's say, a yard in a second. That's a pretty fast clip to move across a yard in a second. A chemical at a high speed—one yard, one second. Well, how far did the energetic signal go in that same one second? The answer is 186,000 miles. 186,000 miles versus one yard.

**What's the point? Signaling is based on efficiency and speed. A resonant vibrational signal is 100 times more efficient and infinitely faster than a chemical.** So it would be chosen by a cell. McClare reveals that. Here's the excerpt, he says, "In competition, resonant molecular machines would undoubtedly be selected over conventional thermodynamic machines."

So the physicist said, "Given a chemical signal or electromagnetic signal, forget the chemical signal, go with the electromagnetic." He's left to conclude and this is important, "We must conclude there is another level of organization in biological systems: A tuned resonance in different molecules that enables bioenergetic machines to operate rapidly yet efficiently." All of a sudden you see physics in the realm of quantum mechanics is saying, "Given a chemical signal or an electromagnetic signal... chemical signal is minor compared to the effectiveness, the efficiency and the speed of an energetic signal."

So now we go back to the understanding of proteins. Why? Because proteins are where life comes from. I say, "Well, how do energy signals affect proteins?" And here's the answer, right out of this paper "Controlling Biological Functions." This is the paragraph: "For a quantum mechanical object, one can arrange interference of several "paths" to create constructive interference that selects one state and destructive interference that blocks the others."

This is exactly what we showed—that energetic super position where energy waves coming together can create constructive and destructive interference and, in the nature of protein mechanisms that reveals that constructive and destructive interference are selecting the conformational shape. Proteins are responding to the interference pattern not to Newtonian classical view. The summary of this paper really at the top of the paper reads very simply: “Manipulation of a quantum properties of matter can influence the course of a biochemical reaction.”

Oh my goodness, quantum biology is really what’s happening. We go back to our original chart where we say, “A signal plus protein equals behavior,” and we said at that time, “Environmental signals are from chemistry or drugs.” But now what do we know? We now know that energy is the primary signal. Chemistry can signal, but not as effectively, as efficiently as energy. **So what is the energy in the body that’s involved with the signaling? It’s called the vital force. It’s an invisible vital energy that is used to shape your biology, which in turn is experiencing or expressing itself as movement.**

Now, we come to this important part and you say, “Bruce, your experiments in tissue culture where you put cells in the tissue culture, you change the environment (the culture medium) and the cells change. This is an indication that the cells are controlled by the signals not by the genes.” I go, “Yes.” And you say, “Why is this relevant to me as a human?” And the answer is very simple and here’s what it is. When you see yourself in the mirror and you see yourself as a single living organism...that’s a misperception.

The simple reason is this, your eyes don’t have the resolution to accurately see what you look like. Because if your eyes could see with higher resolution, what would they find? You’re not a single entity. You’re made out of 50 trillion cells, the cells—the cells are the single entity. Why is that relevant? When I say “Bruce,” by definition I’m giving a name to a community of 50 trillion cells. When you look at yourself as a single entity, I say “No. No, wrong. You’re more like a skin-covered petri dish inside of which are 50 trillion cells.”

There’s a culture medium and it’s called blood and the relevance about that is, as you see yourself as a culture dish with cells in it and a medium called blood, then you recognize this: to the cell it does not make a difference if it’s in a plastic dish or skin dish, it’s still being controlled by the environment. And remember this—the culture medium I used in my experiment was based on the composition of the blood from the organism that I got the cells. If I’m growing rat cells, I look at the chemical composition of rat blood and make synthetic culture medium based on that composition.

If I’m growing human cells, I look at the composition of human blood and then create chemistry based synthetic human blood called culture medium for the cells. I say, “Well, in your cells you already have culture medium and it is called blood and the signals in the blood as well as the signals in the body are actively controlling the expression of your cells. But the signals in the blood, where did they come from?” The interesting aspect is they’re partly coming from the composition of the culture medium, but they’re also due to not just the nutrition that makes the blood, but also the cellular signals. So what are cellular signals?

A lot of them are like hormones and growth factors and regulars. But where'd that chemistry come from? Who is controlling the chemistry of the culture medium? We want to know this because the experiments show that the chemistry of the culture medium control the genetics. The chemistry of your body, the blood, culture medium determines the genetics and activity of your cells. So where does that control come from? The brain is a mechanism of perception. It reads environmental signals, external signals from your body and the signals inside your body. It reads these signals. Then the brain is the chemist that translates the signals into chemistry that goes from the brain into the blood or through the nervous system.

That's really cool. Then the perception of your life is really controlling the chemistry of your blood, which in turn controls your biology. Absolutely. Then I add one more factor and that is this: not only is the environment controlling you because your brain is responding to the environment, interpreting the environment and it interprets it through electromagnetic vibration, simple point. The nervous system sees light, but light doesn't go through the optic nerve. it's electromagnetic vibration. The sense of smell is picked up by receptors in the nose, but the smell molecule doesn't go to the brain, it's the vibrations translated by the nervous system that goes to the brain.

I touch something and I can feel it, but it's not a physical thing going through my nervous system, it's a vibration, a translation by the nervous system and the vibration that goes to the brain. The brain doesn't read the real world, the brain reads an electromagnetic vibration of the real world as interpreted by the nervous system receptors that read the world. As you read the environment, you adjust your biology. You step outside and it's cold out; the sense of cold causes your metabolic system to warm up so you keep your body temperature at the right temperature.

If you walk outside and it's cold out, then the sense of cold causes, as I said, the warming up. But if you walk and out and it's warm out, then that temperature causes your body to cool off, a completely different physiological function. I say, "Well, who controls that?" The environmental signal, that's number one. But then we have to recognize this—that in addition to the brain's perception there's something called the mind and the mind is interpretation. The mind interprets the signals from the environment and generates its own signal and electromagnetic field.

It's the mind's electromagnetic field that ultimately shapes what chemistry is released by the brain and it's done through electromagnetic signaling of the neurons in the brain that affect the release of chemistry by the cells that are responding to those vibrations. If you change the vibration of the cell, you change the response of the cell, which then changes the response of the body. And when it comes to the brain and blood, the vibrations of the brain cause the chemistry of the blood that results in controlling the fate of the cells.

**It's simple and it becomes important that it's not just the environment controlling our biology, it's our perceptions and our belief which is, again, electromagnetic translation of our perception or beliefs of that environment that controls our biology.** While we know that those signals can control our internal biology, what we also have to recognize is this—as illustrated in this next picture right here. This is called magnetoencephalograph and I can read brain activity. You're normally familiar with reading brain activity with electroencephalography where you put wires on a person's head and read the brain activity through the energy conducted through the skull, through skin and then into the EEG.

Why I want to show you this is that magnetoencephalograph, the probe is not touching the head and yet it's reading brain function. What's the relevance? And you have to really understand the profound relevance of that is your thoughts are not contained in your head. Your thoughts as energy are influencing in the field around you as Feng Shui influences the field around you. You are Feng Shui-ing your own field and I go, "Why is that relevant?" Because in simple truth then your brain is like a tuning fork and sending out vibrations that not only impact the cells in your body, but also influence what's going on in the world around you.

Your energy is what's shaping the matter. When we go back to our belief in Newtonian mechanisms, we talked about the fact that there's a physical body and a mind. That the body being physical and the mind being energy are not one in the same. That's why mind has been left out of science for the longest time—It's energy. And in a world of classical physics, a physical body can only be affected by physical things as mentioned in that article. Only the substance of chemistry can influence it. So mind has been left out of medicine in the Newtonian world. But guess what? That world is over.

We're in a quantum mechanical universe now. **Why is that relevant? Because mind is no longer separate from body, mind is over body and I mean over body in this regard. We go back to Einstein's quote, "The field is the sole governing agency of the particle." Now, I say, "The mind is generating a field so the mind is the sole generating agency of the particle called the body."** The mind controls the body and it does so through electromagnetic fields.

**This becomes very important to so sum up and it's this, conventional allopathic medicine built on a classical Newtonian physics model only emphasizes matter is affecting matter and therefore it's focus is on drugs. Quantum mechanics came in in 1925, has not yet been adopted by the allopathic medicine for a simple reason: the business pursuits of the pharmaceutical industry do not want to have energy healing because it has no commercial value to them. In that what do we find? We now start to recognize that cells are responding to all forms of electromagnetic fields and energetic fields and now quantum mechanical properties as well.**

**Super positioning in quantum mechanics, tunneling in quantum mechanics, all of these elements are also involved with shape changing of protein. What's the relevance? Shape change of protein is the expression of life and the shape change of protein is controlled by the signal and the primary signals as recognized in controlling life are now not the chemicals, but the energetic signals and therefore the complete foundation for energy medicine and quantum biophysics. Thank you for listening.**