

# BIOHACKERS

MAGAZINE

DELUXE MAY EDITION

**EXCLUSIVE INTERVIEW  
WITH GARNET DUPUIS,**  
CO-FOUNDER OF *LUCID STUDIOS*,  
CREATOR OF BRAIN ENGAGEMENT  
DEVICE - *NEUROVIZR™*, PROMINENT  
SPEAKER, BIOHACKER &  
INTEGRATIVE HEALTH EXPERT

**BIOHACKING  
THE BRAIN  
WITH THE  
CHANGE  
MAKER  
NEUROVIZR™**

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EXERCISES TO PROMOTE  
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**NEUROPLASTIC CHANGE:  
THE PERFECT FORMULA FOR  
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- *Superior Herbalism & The Three Treasures*

- *Biohacking & Sexology*

- **AND MUCH MORE!**

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Make positive changes

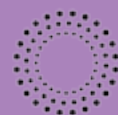
# Unsticking a Stuck Brain



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**neuroVIZR**  
The Change Maker



WE DEDICATE THIS EXCLUSIVE MAY ISSUE TO  
EXPERIENCED WRITER AND CLOSE FRIEND,  
**GARNET DUPUIS**

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# MESSAGES FROM OUR BIOHACKING TEAM



# A LETTER FROM THE EDITOR

At the core of every human person is the continual force of wonder that drives us to discover more truth about the reality of our world; Curiosity, the desire for knowledge, Philosophy, in a sense - all define the human's endless spirit to discover the world, themselves, and the higher force of creation. It is this innate sense of Wonder that continues to lead humanity into the future of metaphysical comprehension and scientific/technological discovery.

That is why biohacking is an integral part of the community, because it harnesses this endless 'desire to know' that lives inside each of us and leads not just the individual towards better overall health, but also the community as a glorious by-product. Through individual, self-discovery, and improvement, one becomes more of service to the shared community. That is precisely why technological products designed to optimize one's individual health are of great value to the wellness community, nation, and world. Furthermore, technological devices that focus specifically on the profound nature of the human, (Soul, & Mind vs. Body and Temporal), are arguably the greatest tools to the human species simply due to their effects on the primal sources of human wonder.

The brain, our supercomputer that houses consciousness as well as unconsciousness, gives us the remarkable ability to reason, to contemplate, the perceive. It is sufficient to say that our brain's health is as important, if not more important than our physical outward health. Mainly because it is the leading determinant for what we do with our bodies. Because of this, it should not be

neglected, but rather, should be engaged and sought to be optimized as well.

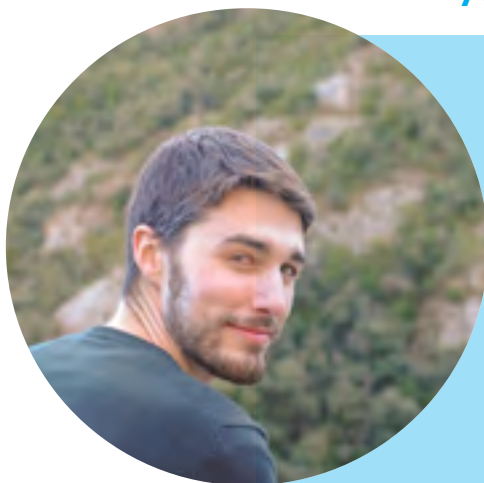
Garnet Dupuis, our close friend and valued contributor, has designed such a tool to help engage the brain in a way that leads to clearer thinking, more reliable perceptions, and better sleep. The NeuroVizr™ is an easy-to-use device that the individual can incorporate into their everyday life to work-out their brain. It uses light and sounds to engage the brain's natural pathways to Waking dreams, so-to-speak, which with continual practice, leads to less 'errors' in neural perceptions regarding pattern predictions.

The significance of this cannot be overstated. Being able to think clearly in a world full of near endless distractions and patterns, is absolutely essential in fueling the individual's efficiency for growth and adaptation to change. As a user of the NeuroVizr™ myself, I can speak truly when I say that it does engage the brain in such a way that it feels similar to a workout, with the added benefit of neuroplasticity and optimal sleep.

At Biohacker's Magazine, we are honored to feature Garnet and the NeuroVizr™ in this edition and hope that all readers will allow their inherent sense of wonder to drive them towards optimizing their brain and overall health, through one of the most impressive brain-engagement tools available; the NeuroVizr™, the change-maker.

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## About Dallas McClain



Born in the USA, Dallas is a passionate reader of theological and personal development books. He holds a bachelor's degree in Biological Sciences. Teaching English abroad, Dallas has been immersed in various cultures and backgrounds while making friends all over the world. He is a Catholic Christian and enjoys time outdoors while being a tennis enthusiast. He is the Co-founder and Editor of Biohackers Update Magazine. He is currently living in Orlando, Florida with his wife & children, where he enjoys writing, sports, and nature hikes in his free time.

Email: [dallas.biohackersupdate.com@gmail.com](mailto:dallas.biohackersupdate.com@gmail.com)

Instagram: [@gates.of.growth](https://www.instagram.com/gates.of.growth)

Website : [gatesofgrowth.com](https://gatesofgrowth.com)

# A MESSAGE FROM COO JEAN FALLACARA

Welcome, dear readers, to the fascinating world of biohacking!

When I first delved into the world of biohacking, I was struck by my insatiable fascination with brain and flow states. I experimented with a plethora of neurofeedback devices, ranging from TCDS to EEG technologies, in my quest to optimize and monitor my brainwaves. The more I delved into this world, the more I realized that I had a mission: to help educate people on how to train their brains to improve focus, relaxation, and cognitive performance, no matter their age.

I was determined to find the most efficient and effective ways to reach peak performance. It was during this journey that I stumbled upon light and sound stimulation techniques, which are increasingly being used as tools for personal growth and self-improvement. These techniques have been shown to have a positive impact on mental and physical health, as well as cognitive abilities.

It was then that I had the pleasure of meeting Garnet Dupuis, who quickly became one of my best friends and soulmate. Garnet opened

my eyes to the power of light and sound stimulations through the process of engagement. Engagement occurs when an external stimulus, such as a flashing light or rhythmic sound, synchronizes with an individual's brainwaves. This synchronization can have a calming effect on the mind and body, reducing stress and anxiety.

I was honored to be among the first to use the beta version of NeuroVizr™, which allowed me to deeply study the frequencies of sound to improve memory and focus, as well as the exposure to specific patterns of light to increase alertness and cognitive performance.

The journey of biohacking has been an incredible one for me. I have learned that you cannot change your innate nature, but you can optimize it to achieve the best version of yourself. With the help of light and sound stimulation techniques, we can all train our brains to be more focused, relaxed, and productive, no matter our age. So why not take that first step today and start optimizing your brain for peak performance? The possibilities are endless!

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## About Jean Fallacara

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Known as Cyborgainz, born in France, Jean is an athlete, entrepreneur, scientist, public speaker and an Art collector. He is the founder and CEO of CyborgMedia, the Managing Director at inTEST Corporation and the COO of Biohackers Update Magazine. He is also the author of "Neuroscience Calisthenics: Hijack your Body Clock." Jean holds a bachelor's degree in biochemistry, a master's degree in immunology and genetics, and an engineering degree in biotechnology. He has also studied neurosciences and brain functionalities, and law and finances. Jean recently graduated from the MIT in XR-VR-MR. He is currently living in between Boston and Montreal after his biotech company was acquired by inTEST Corp (NYSE:INTT) in October 2021.

Website: [jeanfallacara.com](http://jeanfallacara.com) / Website: [cyborgainz.com](http://cyborgainz.com)



# ARJUN'S STATEMENT

As we continue to navigate through these challenging times, it is heartening to see how technology has positively impacted our health and well-being. From telemedicine and wearable technology to health apps and virtual fitness classes, technology has enabled us to stay connected and take care of ourselves and our loved ones.

One of the most significant positive impacts of technology on health has been the increased access to healthcare. Telemedicine has made it possible for people to receive medical care from the comfort of their own homes, which is especially important for those who are at high risk or unable to leave their homes.

Wearable technology and health apps have also allowed us to track our biometric data and make lifestyle changes that can improve our overall health. We can now monitor our heart rate, sleep patterns, and physical activity levels, and use this information to make better-informed decisions about our health.

Additionally, technology has made it easier for us to communicate with our healthcare providers and receive timely medical advice and treatment. With virtual consultations and

online portals, we can now access medical advice and treatment from anywhere, at any time.

As we move forward, it is important to continue to embrace the positive impact of technology on health and use it to our advantage. Let us continue to explore new ways to leverage technology to improve our health and well-being, and to support one another through these challenging times.



## About Arjun Chauhan



Born in India, Arjun is the master of all trades, the Chief Marketing Officer of Biohackers Update Magazine and a soccer enthusiast. He holds a bachelor's in commerce and a Master's in Business administration, specializing in marketing and human resources. He has 6 years of experience in Content Marketing and is always looking forward to gaining more from life. With a passion towards nature, he is currently in the Foothills of Himalayas, in the northern part of India.





***“We are all connected; To each other, biologically. To the earth, chemically. To the rest of the universe atomically.”***

***— Neil DeGrasse Tyson***

**OUTER**



# **APPROACHING CHANGE - OPTIMIZING OUR BRAIN, HABITS, AND OVERALL WELLNESS**

*The following article is taken  
from an insightful discussion  
between Garnet Dupuis and  
Andreas Breitbart.*

Garnet:

I would like to express my sincere appreciation for the time we can spend together. Based on our interactions, I have a deeply positive perception of you and feel inspired to cultivate a meaningful connection.

Andreas:

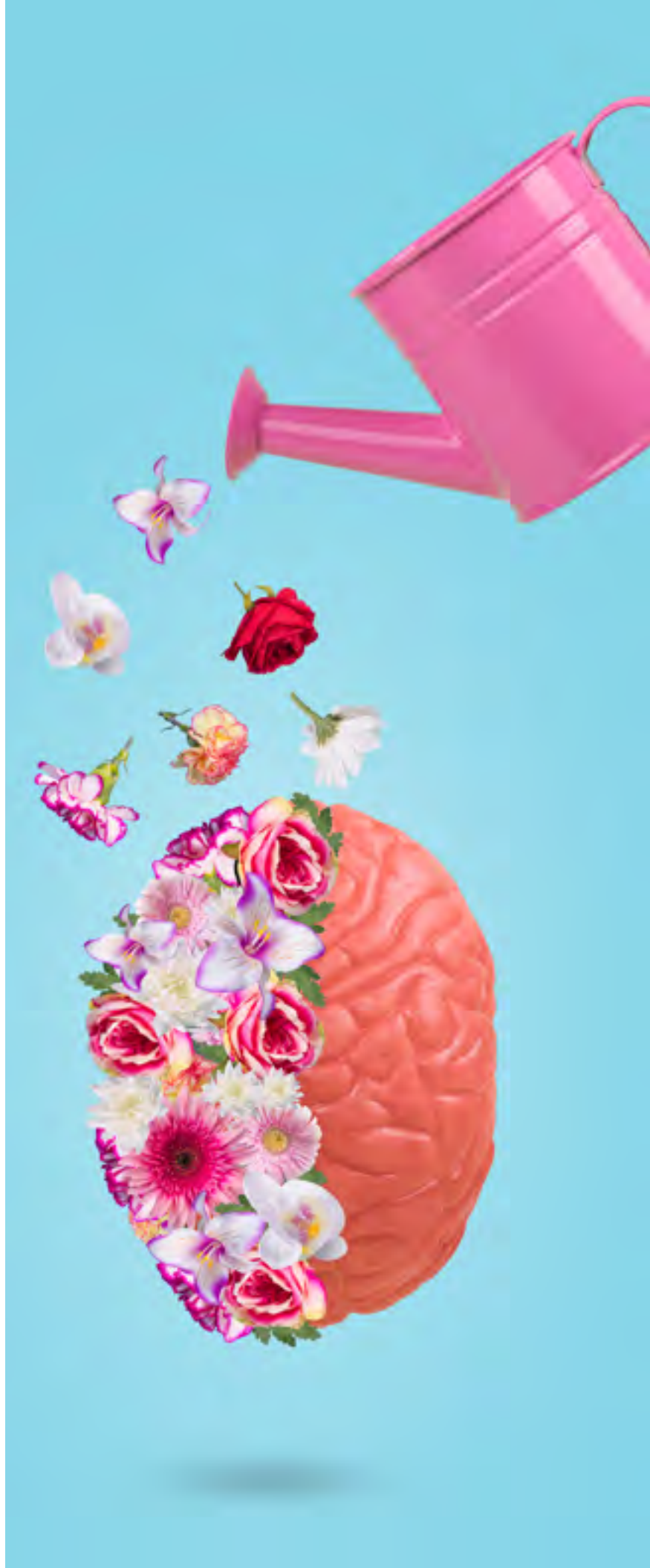
I share your sentiments, and I am grateful for the opportunity to engage with you on a personal level. In a world where commercial success is often prioritized, it is refreshing to encounter someone who values genuine human connection. Your openness and experiences gained from traveling the world provide a unique perspective that I find both enlightening and entertaining. Thank you for bringing a breath of fresh air to my professional network.

Garnet:

In regards to biohacking, I believe the concept of change is more important than the concept of biohacking itself. Adapting to the ever-changing world, learning, growing, and changing established patterns are crucial to prevent stagnation. My work focuses on this idea of continuous improvement, and I admire your honesty and willingness to engage in open conversations. I'm excited about the potential for a meaningful conversation today, and I trust your ability to navigate through it.

Andreas:

The opportunity to compile an issue for Biohackers Magazine indicates a shift in perspective regarding bio-





hacking. It was previously perceived as body modification, but now the focus is on adapting the brain to keep up with a rapidly changing world. The medical use of psychedelics, such as LSD, is being reconsidered as a means of breaking out of learned patterns. Your NeuroVizr™ has played a significant role in improving brain plasticity, similar to the effects of ketamine. The diversification between brain and mind is often overlooked, and the prefrontal cortex is overemphasized.

**Garnet:**

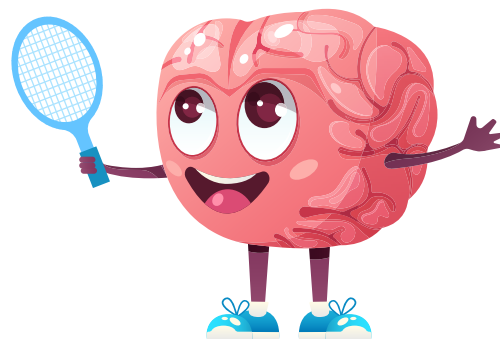
Later in our conversation, I can discuss my recent research on brain optimization using light and sound applications, EMDR, and neurofeedback techniques like dishabituation.

**Andreas:**

Before I had the pleasure of meeting you and experiencing the NeuroVizr™ device, I had experimented with three different light and sound devices. Although I had used one of them in a clinical setting to measure brain wave activity during sessions, all of them were expensive and difficult to use due to complex software. However, I always believed that they held the potential to unlock new ways of utilizing the brain. Then, you arrived on the scene with your sophisticated NeuroVizr™ app and device combination, which is truly exceptional.

**Garnet:**

As technology and our understanding of brain function continue to evolve, we are experiencing a significant shift



in paradigm. Popular and scientific interest in psychedelics has resurged, and we are in the midst of a transformative time. While some light and sound processes, like brain entrainment, can be repetitive and non-compositional, sustained randomness can lead to a temporary state of depersonalization and dissociation,





providing relief from constant mental activity. However, this state does not offer significant neuroplasticity triggers for positive growth. Additionally, I've been exploring the difference between trance and tripping, particularly in relation to the default mode network.

**Andreas:**

I believe there are many opportunities to promote neuroplasticity and encourage the brain to be receptive to new information. While technology has helped us relax in the past, there are now more sophisticated methods available to induce neuroplasticity, which can assist in adapting and healing quicker from challenges. This is exciting news that I have discovered while exploring this technology.

**Garnet:**

The concept of neuroplasticity is the biggest news in neuroscience in the past decade, as it reveals that our brains can change for the better through proper stimulation. The key

question is how to achieve this change. Attention is critical, and sustained attention is necessary for neuroplasticity to occur. Pleasure and pain play a role in focusing our attention, which is why they are important. When faced with the need for change, it's important to find the right form of stimulation to match the desired outcome. As a prominent figure in the field, how do you approach change and achieve results?

**Andreas:**

I believe in taking an old-school approach to implementing change. The first step is recognizing the need for change, especially as I am reaching my 50s and tend to gravitate towards my comfort zone. It's essential to direct my attention towards the area I need to work on, which is why I find cold therapy effective. Sitting in an ice bath requires me to confront the discomfort and either react to the signals

or calm them down. This is the prototype of adaptation, where the brain is challenged to fight or flee, and learning begins when we stay calm. I've come to realize that understanding the mechanism behind the change is crucial for me, whether it's taking a substance or jumping into an ice bath. Give me a model that I can understand, and I will try to endure it. If I feel a sense of accomplishment or satisfaction after, I will stick with it.

**Garnet:**

In the field of neuroplasticity, there are three essential elements that must be present in order to induce positive change. The first two are sustained attention and marginal demand, which have been previously discussed. The third element, often expressed as open-minded willingness, faith, belief, or understanding, plays a crucial role in engaging in neuroplastic change. It appears that having an intellectual understanding of why a



particular activity is beneficial can significantly contribute to successful neuroplastic adaptation. Furthermore, a fourth element, the “secret sauce,” is the enjoyment of the activity. When an individual enjoys the activity, the other three elements become exponentially more effective.

**Andreas:**

I understand. It seems that our individual experiences and wiring may affect how we approach change. My background in storytelling has led me to value understanding the mechanism beforehand, which can enhance the effectiveness of the process. I agree that joy and a challenging type of pain can both be motivators for change. Painful experiences can also stimulate the desire to push through and continue with the process. It may be beneficial to include a degree of pain experience when considering the factors that contribute to positive change.

**Garnet:**

There are two primary motivators: pleasure and pain, commonly referred to as the carrot and the stick. Pain is generally a deterrent, while pleasure is an encourager. However, there is a certain type of pain that can feel positive. Similarly, there is pleasure that can feel correct or necessary, even if it’s not enjoyable in the traditional sense. For instance, getting stretched out may not be enjoyable, but it can feel correct or beneficial. In your case, when you’re in the ice, it may be uncomfortable and painful, but it’s worth considering if there’s a positive aspect to

the pain, similar to the feeling I experience during body work in Thailand.

**Andreas:**

I have found that exposing myself to cold temperatures helps me to focus and center my mind. It provides a calming effect and reduces the mental clutter that comes with multitasking. However, I do not recommend taking client calls while sitting in the cold as the discomfort and shivering can be distracting and make it difficult to maintain a professional demeanor. It’s important to prioritize the task at hand and find a suitable environment that allows for clear and uninterrupted communication.

**Garnet:**

I’m curious, have you ever tried something that didn’t work out for you? I’m not talking about specific methods or devices, but more broadly speaking. As someone who is fascinated by change, I’d love to hear your thoughts on why those attempts didn’t pan out.

**Andreas:**

In my experience, the abundance of tools available in the realm of biohacking can be overwhelming. While I have experimented with various technologies, I have found that many have promising narratives, but did not necessarily work for me. Although I appreciate techniques like the Wim Hof method, my reaction to pure breathing techniques has not been as impactful as it has been for others. I continue to maintain my personal breath technique of nose breathing during





nonverbal activities. Despite having tried other techniques such as hyperventilation, they did not yield significant results as advertised.

Garnet:

I really appreciate your comment about how people in the public eye are often seen as having everything figured out with ease. As someone who has taught complementary healthcare techniques for many years, I've come to understand the importance of approaching learning with honesty and an open mind. Your honesty about the overwhelming amount of information and unrealistic expectations within the biohacking community is something that many people can relate to. As influencers, it's essential to promote techniques while also acknowledging that everyone's experiences may differ. Managing expectations is key, and allowing people to have their own unique experiences is vital. Thank you for sharing your insights on this important topic.

Andreas:

Absolutely, I completely agree with you. What works for one person may not work for another, and what works at one point in time may not work at another. We're all unique individuals with different needs and requirements. I would never recommend that anyone follow a specific protocol just because an influencer or coach claims it's the only way to do things. That's simply not the case. I firmly believe that managing expectations is crucial in our industry, whether we're working with a professional athlete

or communicating as a media personality. If we hype something up too much, there's a good chance that it won't meet the person's expectations, and they'll be left feeling disappointed. I think it's important to embrace the unexpected and not always rely on the most popular communication style of promoting things as "the best." Speaking of which, I've been really excited about the potential of the NeuroVizr™ and I'm glad to have the opportunity to discuss it with you. You have a unique talent for putting together different ingredients and creating something truly special. It's not often that you come across someone with that kind of gift, and I appreciate your humility about it. Let's keep exploring the possibilities and seeing where our flying to the moon days take us.

Garnet:

You know my perspective has always been primarily spiritual, and I'm drawn to practices that enhance my consciousness and awareness. However, I also value feeling good and maintaining good health, which becomes increasingly important as I age. What motivates your interest in biohacking?

Andreas:

After experiencing a total crash in my early forties, it took me six months to fix myself. I was fascinated by the ease with which I could repair my body and mind by finding the right resources and taking a deeper look at my well-being. As a trained editor, it wasn't difficult for me to read studies and acquire knowledge. This sparked my interest in bio-

hacking, and I began exploring new approaches to optimize my physical and mental well-being. Now, I'm committed to sharing my experience and helping others find the right tools to enhance their overall wellness.

Garnet:

So how did you start? Specifically, I am curious to know about the modifications you made that steered you in a more favourable direction. Furthermore, I am interested in understanding the pivotal moments that contributed to your success.

Andreas:

I stopped consuming substances and foods that caused inflammation in my body and mind. I also learned to avoid pushing myself too hard and instead focus on gradual progress. By understanding my blood work and gut biome, I identified foods that were not suitable for me. I prioritize the journey over the destination and help professional athletes find their optimal position for better performance. Ultimately, my approach is about preventing problems before they occur by relearning how to take care of ourselves.

Garnet:

Can you describe your spiritual or philosophical perspective on life and reality? What is your understanding of the meaning behind it all?







**Andreas:**

Yeah. Have as much fun as possible without destroying too much.

I don't believe in pursuing an ultra-long lifespan, even if it means a longer health span. My priority is to feel alive, happy, and content, while treating others and the planet well. I don't take myself too seriously and balance my desire to learn and experience new things with not using up resources excessively. I don't need external motivation to keep me going, as I am capable of pushing myself.

**Garnet:**

Thank you. Do you perceive yourself as a good person?

**Andreas:**

I don't believe anyone should judge themselves and it's better to ask someone else to assess whether we are good people or not. However, I strive to treat others with honesty and openness to their thoughts. I am constantly fascinated by new directions and ways to change things. For example, I have implemented a biohacking sandwich to combat a decrease in energy levels in the afternoon, which includes using a PEMF mat and frequency-specific microcurrent. This allows me to maintain good brain activity for an additional three to four hours, which I find valuable.

**Garnet:**

My next topic concerns the power of habits, which I'll illustrate with a personal story. For nearly two decades, I had a habit of checking the clock above my stove every time I walked from my treatment room to the kitchen in my two-story

condo. This habit was so deeply ingrained that even after my divorce, when my ex-wife took the clock, I would still reflexively look up at the empty space. This experience made me reflect on the other ingrained habits that might not be serving me well and how challenging it can be to change them. As the brain is wired to create habits, there is a competition for neurological resources that makes it difficult to overcome established patterns of behavior. So, I invite you to consider what habits you might have that have become your reality and how you can work to change them?

**Andreas:**

Thank you for sharing your story on habits, it was quite insightful. It seems that habits can have a profound impact on our lives and can be difficult to change. That's going to stick with me in every keynote about having for the time to come.

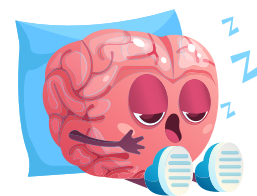
In my experience, negative self-talk can be a destructive habit that is challenging to break. While I have restructured my life in recent years, I still have routines and habits that I rely on, particularly in my daily biohacking practices. It's important to reflect on our habits and determine which ones are serving us and which ones we need to change.

**Garnet:**

Like what if you don't mind?

**Andreas:**

I have found that having a dopamine stack in the morning, which includes light, cold,







SCIENCE 



and either coffee or movement, helps me function better throughout the day. However, I struggle with the dopamine addiction that comes with mobile devices, despite being aware of their addictive nature. I can easily interrupt these bad habits by replacing them with better ones, but I struggle with automatic processes. Most of my habits relate to food consumption, such as eating one meal a day during the week and ending my day with two kiwis. My career has changed multiple times, and my brain's inability to focus on one thing for a prolonged period of time makes me a big fan of the NeuroVizi™ device. I believe there is potential to explore how to focus a brain that doesn't want to focus, and this is a topic of importance for me currently.

**Garnet:**

In my latest work, I've developed a new area called brain optimization, which is divided into two broad categories: melting mental blocks and erasing mistakes. The former involves relaxing existing neurological habits through a priming process, such as the use of psychedelic compounds or EMDR neurological applications using light and sound. This is designed to reduce amygdala-based reactivity to threatening experiences, which can be particularly helpful for those suffering from PTSD. The latter category involves using multimodality intensive neurofeedback to scramble the eggs of old habits, creating a tendency for change, and then reinforcing new signaling patterns. This approach can effectively erase

mistakes and change rigid patterns. Although our brains are built to make predictions and form habits, they also have the capacity to change and adapt. We can use this neuroplasticity to our advantage in optimizing our brains for peak performance.

**Andreas:**

A few years ago, the possibility of altering an aged brain would have been considered unlikely or impossible. Therefore, the fact that new information suggests that it is now possible to do so brings hope for everyone.

**Garnet:**

Thank you for your time, Andreas. I appreciate it and respect your busy schedule. Do you have any final thoughts?

**Andreas:**

There's a lot of potential for mental optimization, especially with the success of neural training in sports like Neuro-Athletics. We see this incredible ray of success, of neural reaction training in Germany, even with the athletes at the APC at Red Bull. I believe your vision for brain training could be the next big thing once the Neuro-Athletics trend. Improving brain capacity is the logical next step after enhancing reaction time. I'm excited to see more people discover these possibilities.

**Garnet:**

Thank you, thank you for the opportunity to develop a friendship that transcends geographical boundaries.

**Andreas:**

Thank you.



## ABOUT ANDREAS BREITFELD



*Professional Biohacker Andreas Breitfeld is a native of Munich, Germany. He has not only succeeded in optimizing his own life through biohacking. He also teaches others how to optimize their lives*

*This works particularly well for people with high self-demands and high self-motivation. With people who want to or have to achieve top performance: for example, entrepreneurs, top managers or even top athletes.*

*Andreas Breitfeld has years of experience in how to do this. He knows the tools that can be used to promote performance through simple measures in the private environment, how to achieve and measure progress, and he is familiar with the scientific background from physics and chemistry, medicine, biomechanics and psychology. He works with Top athletes in several sports and shares his knowledge widely. This led to countless media features and TV appearances in the German speaking countries, as of today he is official Biohacker for the Red Bull Media and has weekly podcast with Red Bull on Biohacking and has published the first book especially dedicated to Biohacking in Sports. <https://www.m-vg.de/riva/shop/article/21462-biohacking-fuer-sportler/> and now the second one is already around the corner: <https://www.beneventopublishing.com/ecowing/produkt/ab-jetzt-biohacking-2/a>*

# YOGA, BREATHING, & KINDNESS

A PEACE  
OF MIND





*The following article is taken from an insightful discussion between Garnet Dupuis and Dr. Larry Payne*

**Garnet:**

I've been looking forward to this day. I'm sitting with my dear friend, my brother Larry Payne. We've been friends for 40 years. I'm delighted. We haven't seen each other for a while.

What I'm wanting to talk about is change. The fact that life is full of the demand for change. A lot of us, I think everybody, in one way or another, wants to change. However, wanting to change is not enough because you have to know how to change. Just wanting it is a good beginning, but crossing the bridge of change is another thing.

Of course, I know you, and I have a good insight into what you've done, but people don't know who you are. So, help us

know you, why do what you do, and why did you start doing what you do. Also, why do you keep on doing it?

**Larry:**

Well, first, I would just like to acknowledge, from my standpoint, our friendship and that you were one of my first teachers in the whole evolution of my health. You were my massage therapy teacher. And that was before I even started yoga. We go way back, and we stayed dear friends all this time.

**Garnet:**

Before you started this, you were doing something else. You came to school to learn about health and wellness, but what were you doing before that?

**Larry:**

I was the West Coast manager of advertising sales for Mc-Calls Magazine. I don't know how but when I was young,

I was oriented toward being successful with money. So, I found this vehicle, and I was doing well. And the challenge, though, in that whole advertising profession is that your lifespan is 10 years shorter for how you're pushed. There are no hours. It's just the more that you do, the more they give you.

I had reached a point where I was one of their top salespeople. They have a meeting once every couple of years and get everybody on some island. So I'm out there on this island, and I had developed a serious back problem from all of the work, as well as some nervous twitches. So, I was sitting in the room on this island and looking around, and every person in that room had a twitch. Including the ad director.

And they came out with these baseball bats that they handed out. They had a plaque that said: "Nice guys finish last." I looked at that, and I looked around the room, and I said:



"What the heck am I doing here?"

When I came home, I told my partner everything, and he goes: "Larry, why don't you come with me to a yoga class? I got you, guy." That was some 45 years ago.

I went to the class, and there was this older woman teaching who was the disciple of Indra Dey. I looked at these people warming up, and I said I couldn't possibly do that stuff. She ensured me, and she gave me almost a 15-minute relaxation. After I opened my eyes, I had no twitches, my back pain was gone. I felt like I was high, and it lasted for four and a half hours. So, I came back to town, and I found a local yoga teacher, Rabon Solomon Delgado, at Scientific Yoga. I studied with him. And within a year, I was off to take a trip around the world.

**Garnet:**

Okay. I'm going to pause right there because the running theme in this interview is change. Why do people change? How do they change? So what you just told us was a massive change. What was it that made you decide to do it?

**Larry:**

Many things, but mainly just stopping everything and saying: "What do you really want to do? I wanted to have a place that's center for learning and experiencing growth in the field of yoga and massage. Now, we are sitting in the studio I have had for 40 years. It happened because I took the time to get away from everything else and say: "What's really happening with you?"



**Garnet:**

OK, talking about changes some more in yoga. If you go to a yoga class almost anywhere, it's very likely that there are going to be more women there than men in the yoga class. Always, always. But in the beginning, that wasn't the scene.

**Larry:**

Not in India.

**Garnet:**

Not in India. So what has it been like? Because you've been one of the absolute leaders in the Western yoga movement, what has yoga been?

I have the impression that in India, in Lineage, yoga was primarily a male tradition. It was a male-structured technique. Broad shoulders, narrow hips, that whole thing. Then women come along. Not only do they have a different energy, but they have different body shapes. Their shoulders are not so big and broad. The hips are wider.

What have you seen, because you've seen it in many places, as the increasing integration of the female into the character of yoga? Was it an easy transition? Did men come or men didn't come? How did yoga become so feminine when it began so masculine?

Larry:

In my opinion, in India, the Brahman cast, which was men, set the standards for all of this stuff. Krishnamacharya never taught women things like chanting or anything like that until much later on.

And then they had some women there. Well, the people who brought it here are what I remember as the first wave. That was kind of during the hippie times, so it was Swami Vista Dianda, Swami Sati, Ananda, and Yogi Baja.

Garnet:

And Kundalini - the Kundalini folks.

Larry:

They came here in the seventies. I think that the reason it became so female is that these gurus when they came over, didn't attract too many men. It was just women. So when you would go to a yoga class, 80% of women and almost every one of these gurus got in trouble. They really did.

Garnet:

Well, they've never experienced female Western femininity bowing themselves at their feet. It's, at a certain point, irresistible. And I'm not saying it's a good thing or a bad thing. I'm just saying it's understandable.

Larry:

But it's not understandable to modern women now.

Garnet:

Not at all. It's horrible. That's my point. This evolution has been dynamic and sometimes

dramatic. Part of the reason I'm asking is the insight into the historical element of this world.

The other part is that right now, the conventional so-called biohackers movement, which is a compound of many different techniques and devices, and ideas, has been and still is predominantly male.

I'm curious and tracking at what point and to what degree females begin to impact this predominantly male movement. Now there's a little window opening, and it's a major curiosity of mine, - is this the time when the feminine has a substantial impact on change?

Because again, I'm looking at things that changed. One of the things that changed in the yoga movement was this Asian male dominance to a predominantly female trend and culture in most countries around the world. What do you think? Because you've seen it, you've lived it.

Larry:

Absolutely. Yeah. And I think it's damn time. I admire the women coming forward, and it really is their time. They often make better decisions, and we'd have a more peaceful planet if we had more women.

Garnet:

When people see, whether it's on social media, it's almost always women doing the postures. I mean, remarkable postures. I don't know what the image is supposed to be. We'll talk about that. Has the image of yoga changed? But you said there was an early movement. What defines the later movement, the thing that has led up to now?

Larry:

Well, one of the people that needed to be mentioned was a woman named Rama Vernon. Rama Jyoti Vernon. She was a pioneer. She had a lot to do with where women are now. She and Sachi Ananda organized something called Unity in Yoga.

That was the first time all the different groups came together at Marietta Hot Springs.

Garnet:

The point is that lineage could also be interpreted as a school, and the schools were not integrated. Oftentimes, they may be actually competitive.

Larry:

One of the things that Krishnamacharya taught is that yoga should be taught for three stages of your life.

Garnet:

Okay. This sounds meaningful here.

Larry:

A building stage. I call it young and restless.

Garnet:

Good

Larry :

Name Rock. Shana the middle. You want to maintain it as long as you can. You don't want to get injured, which means you need one-on-one therapy. Those were his three big ones. Other people have written books about more than those states, but those are the three big ones that I got from him. If you look at





yoga in America, especially Santa Monica, California, 80% of the yoga was for the young and restless.

**Larry:**

Over a period of 10 years, 30,000 people went to emergency rooms because they went to a young and restless class.

I thought, here's a need. So what happened is that Krishnamacharya got his first ever middle-aged Western students. Krishnamacharya started teaching differently, and he taught it to his son, and they called it Vinnyoga. It was geared for everybody, but it picked up on that middle bracket.

The principles of Vinniyoga say that breath is really important, and you could apply it for any age bracket.

**Garnet:**

That's right. You're picking one of the questions out of my mind. So, breathing is important.

**Larry:**

Yeah. The other thing is that the spine was the important thing. When you walk into the room, what makes you look old?

**Larry:**

Bend over. You bend. Yeah. If you take young and restless yoga, you have to have perfect form. Feet together. Don't bend your leg, all that stuff. But in this stage, you have a function.

**Garnet:**

Function.

**Larry:**

Yeah. So when you're bending forward, and you're standing, instead of being strict, you let your knees soften, so your back will go. Now, not everybody has to do that.

**Garnet:**

But some do.

**Larry:**

Some do, and they're mainly guys. The focus is on the breath function over perfect form, dynamic and static, and something that is called PNF - Proprioceptive Neuromuscular Facilitation.

**Garnet:**

Okay. Is this, in a generalized way, describing what I call the later stage? Are you talking about what we'll call - the maturation or the later stage of yoga in the West?

**Larry:**

I think this middle stage is yet to blossom. I mean, that's what I'm trying to do with my Prime of Life Yoga Program.

**Garnet:**

Let's talk about that. Prime of Life. Why did you create Prime of Life yoga? How is it doing as

a yoga movement, and what is it?

**Larry:**

Well, it was inspired by Jessica Char and also Vinnyoga.

**Garnet:**

Describe the name itself, prime of Life Yoga. What's the meaning of the name?







**Larry:**

I was inspired by this person that we both know, Yehuda Netanel. I was at a function at his brother's house, and we were sitting there talking about yoga, and he said: "It's really sad. I'm 55 years old. I'm in the prime of my life, and I can't even go

to a yoga class." So, it hit me. It's time you should be able to travel and not get injured when you go someplace. Feel good. And that's where the name came from. It's 40-something to 70-something and it's also the most affluent period of your life in people's minds.

**Garnet:**

Bingo. Yep.

**Larry:**

Prime of Life.

**Garnet:**

Prime of Life Yoga.

**Garnet:**

Knowing that you've not matured in the biohacker movement. I'll call it maturing in the human potential movement, primarily with yoga. What about the idea of change and making things better. Because that's what principally yoga is supposed to do.

What's it like to make a decision? What's it like to go up and down in a process that is devoted to positive change? What's it been like for you? What are the challenges? What were the rewards? Because you've done it for your adult life now.

**Larry:**

Wow. That's a question. The first thing is that if you want somebody in this field, you have to, in your heart, want to help people.

**Garnet:**

Talk more about that. We'll talk more about other things. What does that mean? What does that feel like? Why do that?

**Larry:**

I would like to teach until I drop. Hopefully, no time soon. I really, truly enjoy helping people and the feeling that I get from that.

It was a big deal on my trip around the world to meet this guy. I went to his class, and afterward he invited me to his home because I was interviewing people. I sat with him, and at the end, I asked what could I do to be a really great teacher. He said two things. Okay. He said, number one, be an example.

**Garnet:**

Be an example.

**Larry:**

He said, number two, don't be swayed by the pairs of opposites.

**Garnet:**

Okay. Interesting.

**Larry:**

Don't let it go to your head when someone says something horrible to you. Don't let it bother you. Okay. Don't be swayed by that.





I've learned as the goal is to quiet your mind. One of the main things is to quiet the distractions of your mind. Now, what I've noticed recently, and I don't mean this as talking down - what's sad is with the birth of the Internet, there are certain yoga people that look very attractive. However, they have very little knowledge of what yoga's all about. But they look good in their postures.

**Garnet:**  
Yes, yes.

**Larry:**  
And they're gorgeous. They're attractive, and they're wearing skimpy stuff, and they have thousands of followers. Thousands.

And yet they never really did that much serious studying. They don't know much about philosophy. And the Internet and TikTok and all those things have blown some of these things way out of proportion.

Here in Santa Monica, California, every weekend, there's some new person coming through. Teachers from India. Amazing people with wonderful knowledge. But people are following people that look good and are just more caught up in the physical aspect of it. And yet, there are some really dedicated schools of yoga and meditation that are really sincere and not caught by that. But that's one of the big distractions - to follow something that looks really attractive.

**Garnet:**  
Many things in the conversation have impressed me, but that willingness and intention

to help others - why? What's at the heart of it?

I have the highest respect for the experience of learning because that's what changed my teaching. I had a good amount of arrogance and probably still do. But in the beginning, because I was a popular teacher, I had the impression that people were coming to experience my teaching. So, I taught in a way that they had to come to my teaching. And over a period, but a short period, it struck me that was false. That they were coming to experience their own learning. And here I was, making them focus on my teaching, and I reversed it. I became increasingly more attentive to their learning. So I joined their learning instead of having them try to join my teaching.

**Larry:**  
That's very beautiful and modest. I mean, you were an exquisite teacher. Thank you. You got to give yourself a little credit. I mean, really.

**Garnet:**  
The idea of helping others. This is one of the things that I'm mindful of because of my exposure, very happy, positive exposure to this community that is labeled biohackers after a computer term. I'm hoping to see the increase, I won't say it's not there, but I'm looking to see the increasing expression of benevolence, compassion, and sincere willingness to help people. Because there's the danger of the focus being too *much on me*. *Since I get up until I go to sleep, I'm looking at all these*

*things to optimize my experience. "Me" doesn't leave a lot of room for "we" of things. And I hope that doesn't come across as a harsh criticism, but it's a very interesting dilemma when a person decides to improve themselves.*

I have a concern right now because of the internet and the way information is shared and money is made. I'm concerned that there is an emergence of what I'll call the consumerism of consciousness, where awareness is just another product.

For you and your students, do you help them reflect and contemplate upon why? What is easy. I want to learn to be a yoga teacher, but why do you want to be a yoga teacher?

**Larry :**

It still comes back to the fact that I really enjoy and thrive on helping people. Kindness is another big one. Kindness is contagious. So some people really get off on counting the money, but I really get off on helping people. And it's like people remember you.

One of my favorite clients

right now is a woman who is a retired principal. She started as a principal at a school in a really prestigious part of town. She came to me because she had kyphosis, and when she couldn't come in, I started coming to her house. The letters that she gets and the people that knock on her door that remember her. There's a building on Luther Boulevard that has her name on it. People bring her a Christmas tree every year. You can't pay for something like that to have a feeling. There you go.



# About Dr. Larry Payne



*Larry Payne, Ph.D., C-IAYT, E-RYT500, YTRX-1000, is an internationally respected Yoga teacher, author, and a founding father of Yoga therapy in America. Dr. Payne co-founded the International Association of Yoga Therapists, now in 50 countries, and the Yoga curriculum at the UCLA School of Medicine. He is also co-founder of the Yoga Therapy Rx and Prime of Life Yoga programs at Loyola Marymount University, the corporate Yoga program at the J. Paul Getty Museum, and the original "Back Program" at the world famous Rancho La Puerta Fitness Spa.*

*In 2000, he was the first Yoga teacher to be invited to The World Economic Forum in Davos Switzerland, and in 1996, he performed the first documented headstand at the North Pole! He founded Samata International Yoga and Health Center in Los Angeles 1980, where he continues to teach groups and individuals.*

*Dr. Payne is coauthor of the international bestseller *Yoga For Dummies*, Wiley, *Yoga Basics* Wiley, *Yoga Rx*, Random House *The Business of Teaching Yoga*, Samata International and *Yoga Therapy and Integrative Medicine* Turner. He is featured in the *Prime of Life Yoga and Yoga Therapy Rx* DVD series and globally online at Yoga International. Most recently he is author of AARP's *Yoga After 50 for Dummies* Wiley His website is [Samata.com](http://Samata.com).*



# BASICS OF FLICKERING LIGHT & PULSED SOUND BRAIN SIGNALING





### INTRODUCTION:

The primary feature of certain devices is the “photic driving” of “flickering light” stimulation. This effect falls into the larger category of neuromodulation. In some, but not all, devices the “flickering light” is combined with various sound-based pulsing stimulations.

### ABOUT YOUR BRAIN:

Our brain is always seeking the “signal in the noise”. It prefers to organize ongoing sensory stimulation into patterns for easy recognition later on. Having a library of patterns makes predicting future responses easier and faster. In a sense, our brain is “always jumping to conclusions”.

Hopefully these predictions are correct. However sometimes the predictions fail to be accurate...and our brain must change some old patterns for new more effective patterns. Call it Change or adaption or learning or growth. In any case, it is very important to build positive patterns (habits) and it is equally important to be able to change to better new patterns when change is necessary. Technically, this “dance” is known as the “stability/plasticity dynamic” - and we must be good at both.

### TYPES OF FLICKERING LIGHT & PULSED SOUND STIMULATION:

#### 1) *Brain Entrainment:*

a. Originally discovered in the late 1930’s, this phenomenon was called the Frequency Following Response (FFR). Lacking sophisticated technology and lack of motivation, the FFR remained a dormant sub-

ject until the 1960’s-70’s. At that time, FFR was renamed as Brain Entrainment.

b. Brain Entrainment recognizes that when stimulated with regular and repetitive light or sound (and others such as electricity and magnetism) signals, the brain will begin to produce electrical brain waves in the same frequency.

c. Neurologically, Brain Entrainment is primarily a “top-down” organizational process based on prediction and pattern recognition.

d. To entrain the brain, research has demonstrated that the process generally occurs in two stages:

#### i. *Superimposition:*

1. In which the stimulating signals imposes or “forces” itself upon the brain;

2. If the signal stops during this stage, typically the brain also stops generating these signals;

#### ii. *Entrainment:*

1. This second stage is when the brain begins to produce the stimulating frequency on its own and may continue for some unpredictable time (usually short) thereafter;

2. To reach actual entrainment, typically the regular repetitive stimulating signal must be sustained for at least 6 to 8 minutes in the “superimposition” stage.

e. To successfully entrain the brain to a certain frequency, the signal must maintain its regular and repetitive pattern - variations, interruptions and clustering of the signal rapidly diminishes the



superimposition and entrainment process.

f. There are different types of entrainment signals - each has its own characteristic features:

#### i. Light Signals:

1. Isochronic Light Signals:

a. "isochronic" means "same (iso) timing" (chronic);

b. This regular timing creates the "flicker" effect;

c. Each "flicker" can have a different "shape";

i. Smooth sine wave;

ii. Rigid square;

iii. Sharp triangle;

iv. Off set sawtooth.

d. Each "flicker" can also have a different "duty cycle";

i. The "On" and "Off" can vary;

ii. Example the ON can be 90% of the energy and the Off can be 20%.

e. By choosing variations in the rate of the isochronic

"flicker" (eg. 15 Hz), the type of signal shape (eg. square wave) and duty cycle (eg. 80/20), the quality of the light signal can be extensively modified.

#### ii. Sound Signals:

1. There are two main types of sound signaling for Brain Entrainment:

a. Isochronic:

i. As above, the sound signal is highly regular;

ii. The shape can also vary;

1. Smooth sine wave;

2. Rigid square;

3. Triangular;

4. Sawtooth;

5. Others less used as well.

iii. The sound signal can also have variations in pitch or tone;

iv. The sound signals can also have variations in volume.

b. Binaural:

i. Binaural sound signals are created differently than iso-

chronic signals;

ii. Isochronic sound signals are created "outside the head" and heard through the ears;

iii. Binaural sound signals are created "inside the head" in a special way;

iv. To create an "inside the head" binaural signal, you combine two separate tones -

one tone (A) goes into one ear and the other different tone (B) goes into the opposite ear;

v. The difference between tone A and tone B is processed "inside the head" to produce the resulting tone (C).

vi. Example:

1. Tone A is 10 Hz;

2. Tone B is 15 Hz;

3. Resulting tone C is heard as 5 Hz

vii. Importantly, the "spread" between tone A and tone B is limited to produce a tone C;

viii. When the "spread" is greater than 20 Hz, the resulting tone C gets weaker - at





around 35 Hz, the tone C basically disappears – your brain cannot process the difference in tone A and B;

ix. In brain wave signal generation, there is a small frequency range around 35 Hz that is called the "Frequency Fusion Rate" in which the flickers appear to "blur" into one merged signal;

x. Consequently, claims of a binaural generated 40 Hz gamma signal are not correct.

c. Isochronic vs Binaural Sound Signals:

i. Binaural sound signals were identified in the early 1970's;

ii. The Brain Entrainment effects of isochronic signals are very much more effective than binaural signals.

iii. Binaural sound signals are recognized as the weakest form of sound signaling for

achieving Brain Entrainment;

iv. Despite being much more effective to induce Brain Entrainment, isochronic sounds are not as popular because they require a higher level of compositional design – otherwise the isochronic sound can be unattractive and even irritating to the average user;

v. Binaural sound signals are used extensively because they are very easy to insert into any other sound file and produce a low-profile tone without producing any competing and distracting sound – they are not used because they are so effective but rather because they are unobtrusive while still permitting the manufacturer to make the claim of including "brain entrainment" in their sound source.

d. White, Pink, Brown Noise:

i. In Brain Entrainment, various forms of "noise" can be used to reduce distraction;

ii. These "hissing" sounds can be very effective in submerging the listener in a sonic "envelope";

iii. Such types of "noise" are common in "white noise" devices that block out disturbing sounds and can be found in many sleep aid products.

e. Composed Music:

i. Initially, using attractive composed music (in many different forms) can seem appealing;

ii. The drawback is that because our brain is highly (even irresistibly) attracted to regular and predictable patterns, non-integrated music used as sound for Brain Entrainment can strongly diminish the "Frequency Following" response to "driver frequency" in the signaling (this is especially true when the music is running parallel to flickering light signals) – this "pattern competition/conflict" is found in many soundtracks that attempt to use subtle binaural sound signals mixed into rhythmic musical compositions.

## 2) Random Signaling:

a. Essentially, Random Signaling is the opposite to Brain Entrainment.

b. In Brain Entrainment, the signals form a highly regular and predictable stimulation that is the core feature of the Frequency Following Response.

c. In Random Signaling, the signals are highly irregular and resist any type of patterned predictability.

d. Neurologically, Random

Signaling is primarily a “bottom-up” infusion of noise stimulation that lacks any message resolution or opportunity for integration.

e. Oddly, some manufacturers using Random Signaling will claim that the process is a Brain Entrainment effect when it is absolutely not because it lacks all elements of the Frequency Following Response.

f. Random Signaling with flickering light tends to destabilize foundational brain signal processing with a resultant “dissociative” subjective mental state.

g. The dissociative state will generally be experienced as an odd “floating” or featureless feeling which can be mistaken by the inexperienced as a form of meditation.

h. In short doses, Random Signaling can be productive in reducing stressful or rigid patterns of mind although the subjective reaction for some people can be disconcerting and uncomfortable.

i. If Random Signaling is experienced too often and/or for

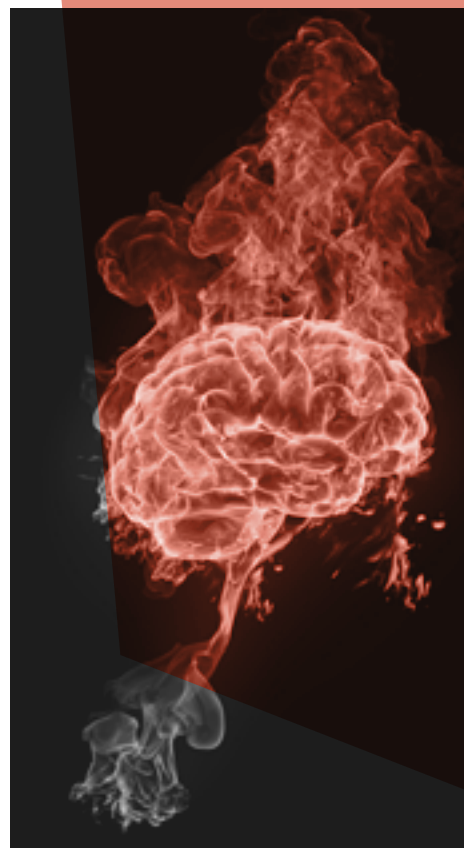
regular extended periods of time, the initial dynamic visual displays of colors and geometric patterns can dissolve into featureless two-dimensional shades of gray as a result of protective neurological inhibition in the visual cortex of the brain. Basically, the brain seeks protection from the sustained stressful “light noise”. It has been noted that similar protective visual inhibition has been displayed in individuals suffering from PTSD and/or nervous exhaustion.

### 3) Brain Engagement:

a. Brain Engagement is the term for a new and advanced form of neuromodulation that targets a style of brain signaling designed to trigger and guide positive neuroplastic changes in the brain.

b. In the 1970's era of Brain Entrainment, there was no awareness of the normal capacity for the adult brain to develop new and positive neuroplastic changes.

c. In simplicity, Brain Entrainment acts to reinforce basic



patterns through predictable repetition and Brain Engagement works to stimulate and guide the generation of new adaptive patterns in the brain.

d. Brain Engagement brain signaling is “compositional” which means it uses different types of signaling within the light (and sound) experience.

e. The signals in the composition will shift from attention-getting destabilization, to well-patterned messages, to short periods of conflict, to reinforcing returns to the vector or theme of the composition.

f. Neurologically, Brain Engagement is primarily a structured “bottom-up” multi-sensory stimulation with secondary elements of periodic “top-down” integrative messaging.

g. Brain Engagement, in order to activate neuroplastic change in the brain, employs el-





ements of “surprise” or “predictive error” to excite the selective attentional states mandatory in any neuroplastic method.

h. The “attentional state” required for initiating a neuroplastic response is completely absent in Brain Entrainment methods – the Frequency Following Response and the accompanying highly predictable signal repetition results in the brain not having to “pay attention” and hence, no trigger of change.

i. Brain Engagement also employs the “marginal demand” element required in any effective neuroplastic method – the experience must be just a tiny bit more than your everyday comfort level – this “tiny bit of demand” helps trigger the change

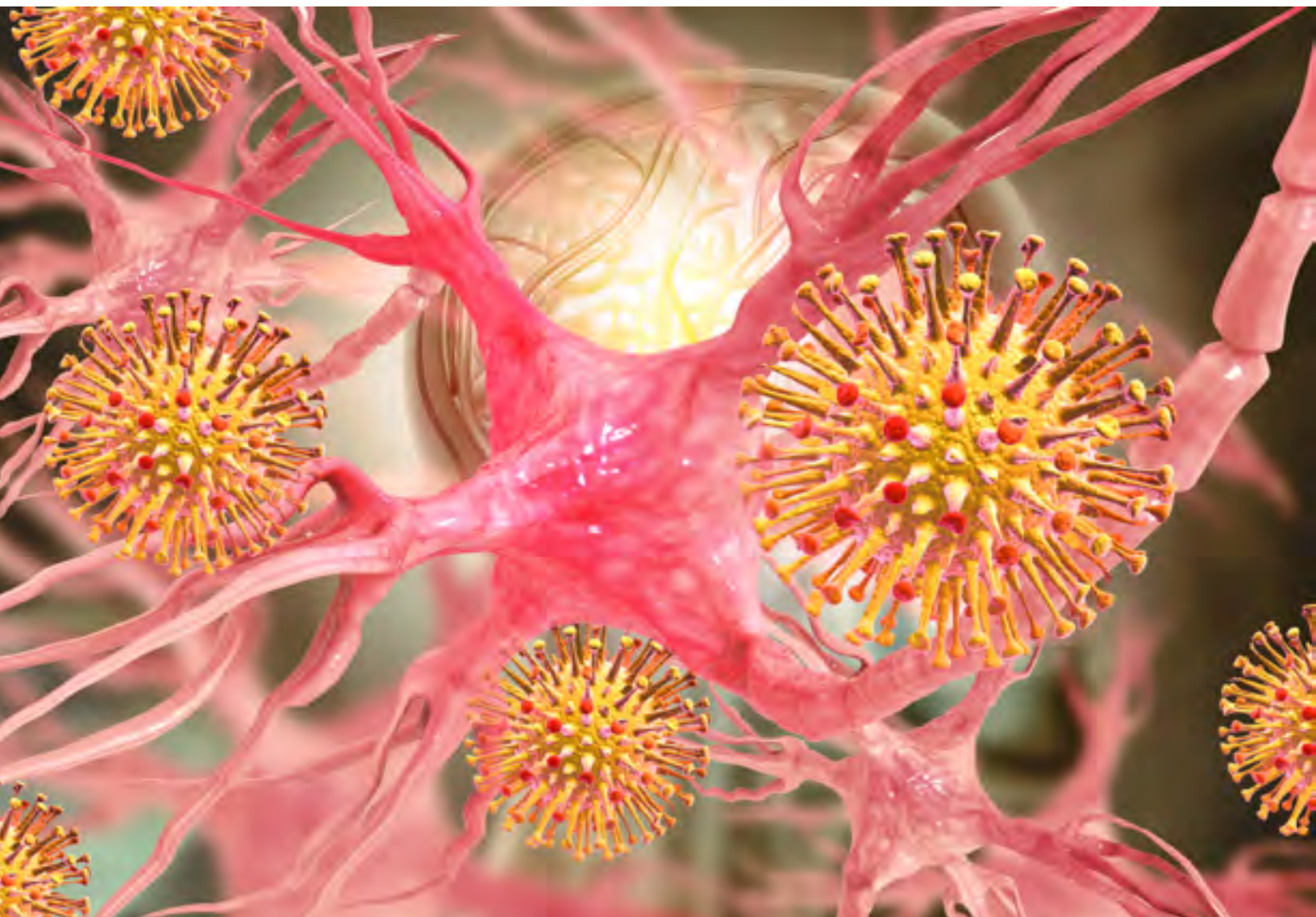
dynamic that is core to positive neuroplastic brain change.

j. Brain Engagement also has an intrinsic theme (technically, a “vector”) that moves the messaging towards a certain “probability state” – beyond the oversimplified concept that a single brainwave frequency will result in a specific subjective mental state, the vector provides a kind of neurological “lesson” that helps move the process more reliably towards the projected “probability state”- with repetition, the session theme becomes more naturally available to the user.

k. Brain Engagement also involves a completely integrated audio soundscape that interacts dynamically with the light compositional experience.

l. The Brain Engagement soundscape is layered with various styles of brainwave signaling that are woven into a “mood framing” musical background – the “mood framing” element purposely avoids the fully structured characteristics of conventional music, thus avoiding the tendency of the brain to “jump ship” and divert its attention into music and abandon the theme “vector” targeting the neuroplastic change dynamic.

m. Both Brain Enrichment and Brain Priming are methodological sub-sets of Brain Engagement. Like Brain Engagement, each approach is specifically involved in dynamic neuroplastic change factors.





# About Garnet Dupuis



*Garnet was born and raised in Canada and is a naturalized USA citizen. He is an Integrative Health and Wellness expert, teacher & inventor with specialties in inter-disciplinary methodologies. With a wide experience in advanced technologies, Garnet has taught neuromodulation applications in major USA universities, professional sports teams, the Marine Corp and Naval Hospitals and lectured in European and Asian countries.*

*Garnet has a broad education including college, university and graduate trainings in Classical and Clinical Homeopathy, Oriental Medicine, Massage Therapy/Bodywork, Hydrotherapy, Remedial Exercise, Biofeedback, Psychology and English Literature.*

*Garnet is co-founder of Lucid Studios/NeuroVizr™, Thailand. He currently resides in the tropical mountain rainforest in Northern Thailand. He is a life-long meditator and practitioner of Tibetan Dzogchen. Garnet is active in wild animal rescue and conservation and has built, manages and funds a sanctuary for SE Asian apes.*

*Website: <https://neurovizr.com/>*

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INNER

*“One who looks around  
him is intelligent, one  
who looks within him is  
wise.”*

*— Matshona Dhliwayo*



# BIOHACKING & SEXOLOGY - USING EMBODIMENT & INTUITION





**The following article is taken from an insightful discussion between Garnet Dupuis and Anna Lindfors.**

**Garnet:**

Hello Anna, thank you for taking the time out of your busy schedule to speak with me today. Your insights and perspective are highly valued.

I am particularly interested in learning from you, as you are a leading figure in the biohacking community and beyond. Your experience and expertise are greatly appreciated. Would you mind sharing a bit about yourself, your credentials, and your goals in this field?

**Anna:**

Thank you! I am thrilled by this question, as it's fascinating to explore the vast narratives of our lives and what led us to where we are now.

So, I like to introduce myself as a biohacking Sexologist and Psychologist.

I specialize in sexological therapy and have developed a new approach to therapy called the HEAL-method, which integrates biohacking techniques, meditation, breathwork, grounding, somatic exercises, and integrative therapy. This approach is a more holistic and effective alternative to traditional talk therapy, which may yield limited results over several years. As a Sexologist, I am passionate about improving people's sex lives and helping individuals overcome the pain and shame associated with sexuality, relationships, and self-connection.

**Garnet:**

This topic usually grabs immediate attention, both positively and negatively, in most forums. As you pursue this path, have you found that doors tend to open or close for you? It's exciting to see you owning your views, credentials, and projects related to sexuality. Can you share your experience with me? Have you encountered more opportunities or obstacles?

**Anna:**

As a young blonde female Sexologist, I get some amazing and memorable reactions. Most people are excited and curious, while others feel apprehensive or fear being analysed and cover that with sex jokes. Despite this, I'm grateful that my work is met with enthusiasm and respect, and that doors are opening for me to help people improve their connection to themselves and their partners. In my experience, the key to elevating one's sex life is to process past trauma and understand what's

holding them back from true connection.

**Garnet:**

I have a question based on our conversation. Do you believe that this message, which focuses on elevating our sex lives by processing past trauma, can only be effectively delivered by a woman? Or can a man deliver this message as well? Additionally, do you think that the current cultural climate is receptive to this message, or do you think this message would have been better received at a different time?

**Anna:**

It's a great question. In my opinion, the ability to deliver this message effectively depends on the individual's personality, not just their gender identity. Societal and generational experiences, as well as transgenerational trauma, can shape the way men and women view and experience sexuality. The challenges that women face in this realm are different from those faced by men.





**Garnet:**

In my opinion a female messenger for this message can be more effective due to the unique experiences and challenges women face in this realm. As for timing, is it possible that this message could have been effective 10 years ago? or it may need to wait another 10 years for societal attitudes to shift further?

**Anna:**

Yes, I think that now is an ideal time to have these conversations as more people are becoming aware of the importance of connection with oneself and others. Sexology is a relatively new field, but the conversation around sexuality has opened up tremendously in recent years. However, challenges surrounding sexual dysfunction remain prevalent and often stigmatized. It's crucial to change the cultural narrative around sex and address these challenges. Studies have shown that approximately 40 to 45% of women experience sexual dysfunction, while around 40 to 60% of men experience the same. I believe we need multiple messengers from different angles to bring about change. For example, only 18% of women orgasm from penetration alone, highlighting the need to shift away from a performance-centric view of sex.

So, it's no wonder that around 70% of women have faked an orgasm.

In our culture, sex is often approached in a superficial and physically disconnected manner, with men and women assuming prescribed roles. Men

may feel pressure to perform certain techniques and positions, while women may feel pressure to please their partner without necessarily knowing their own desires. This results in a lack of true connection and ultimately, disconnection. It's crucial that we shift away from these cultural norms and promote authentic connection and communication in sex and relationships in general.

**Garnet:**

While sexuality is an important aspect of women's lives, their role in society extends far beyond this. Looking at the broader picture, what is the advantage of female influence in creating change within the biohacker movement? As the movement is characterized by constant experimentation and innovation, how can women's unique perspectives and experiences contribute to positive change? As someone who is working towards change in this field, what is your perspective on the role of women in driving progress and cultural transformation?

**Anna:**

The biohacking phenomenon has historically been dominated by a masculine approach focused on devices, supplements, and individual performance. However, there is a growing recognition of the importance of collective and social elements, which have been lacking in this approach. As a self-described feminine biohacker, my approach emphasizes embodiment and intuition rather than strict



tracking and optimization. I trust my body and apply scientific knowledge to optimize my health from an embodied place, including tuning into my cycle.

**Garnet:**

That's a major pivot right there. The whole approach to biohacking represents a significant shift from the quantitative and metric-oriented approach typically associated with the movement. Instead, your approach values sensitivity, insight, trust, and qualitative measures. As a woman, how can you help us adopt this more intuitive and embodied approach to biohacking?

**Anna:**

In order to adopt an embodied approach to biohacking, it's essential to first reconnect with yourself. Biohacking can sometimes become

a form of escapism, avoiding the root cause of issues rather than addressing them. While tracking metrics and taking supplements can still be valuable, it's important not to let those metrics override what you feel in your body. To build a stronger connection with your body, start by tuning into simple things like hunger cues and cravings. For women, it's important to recognize that hunger levels and cravings can vary throughout the menstrual cycle, and it's essential to listen to what your body desires. By tuning in and eating intuitively, we can teach our bodies to crave what they actually need.

**Garnet:**

In this edition, one of the main principles being introduced is the difference between top-down and bottom-up information processing. When we talk about embodiment, it involves



being more attentive to the information that we experience, rather than trying to impose a top-down template or confirmation bias. One of the main problems in Western culture is a deep-seated distrust of the body, which can be seen in the cultural and philosophical mistrust of women's bodies. This mistrust extends to a mind-body duality and a tendency to view the body as a source of temptation, sinfulness, and potential deviation from what is considered "good." To build a more embodied approach, we need to develop a different perspective on the body, one that values intuition, trust, and embodiment.

**Anna:**

In the history of society's treatment of women, there has been a dismissal of femininity, emotions, and the body, which has affected how we relate to our own bodies. Even in today's women's empowerment movement, there





is a focus on masculinity rather than healing and empowering femininity. To fully empower women, we need to appreciate rest, recovery, and tuning into our bodies, emotions and cycles - rather than dismissing them. True empowerment comes from being in alignment with oneself and trusting our intuition.

**Garnet:**

The desire for change is often strong, but the means to achieve it can be elusive. In my work and in your program, the emphasis is on the “how” of change, which is critical. However, it is true that some women may have limited time and resources to invest in their personal development. For example, a single mother with two jobs and two kids may struggle to find the time and money to invest

in their health and wellness. Therefore, a practical approach is necessary, one that doesn't require expensive devices, supplements, or a lot of time. It's about tuning into your body and starting with small steps, such as listening to your hunger cues or paying attention to how you feel emotionally. The focus should be on building a connection with your body and learning to trust it. This can be done regardless of one's socioeconomic status or background.

**Anna:**

My work focuses on making the embodiment process accessible to everyone through simple exercises. Taking just two minutes each morning to tune into your body can make a big difference. For example, I created a sensual dance flow playlist, which has now been

shared around the world and helps people tune into their bodies daily.

**Garnet:**

Hey, maybe NeuroVizr™ can do some light choreography to it.

**Anna:**

Oh my, I would love that.

A simple way to activate feminine energy and centering is through sensual dance, which involves closing your eyes, putting on music, and moving to the beat without thinking about how you look or feel. It's best done standing up, but a body scan in bed can be a substitute. If standing up feels triggering, you can do a body scan in bed and consciously focus on different areas of your body. Gently touch, scroll, and squeeze to create a connection. By consciously

focusing on different areas of your body and creating a connection. Taking two minutes each day can be incredibly powerful and set the mood for your entire day.

The sensual dance flow playlist can be obtained by messaging Anna on Instagram (@healwithanna).

**Garnet:**

Is it necessary to do the embodiment practice in the morning, or can it be done later in the day if there are unexpected interruptions or time constraints?

**Anna:**

Anytime works, but it's nice to do it in the morning to set the mood for the day. However, you can also do it in the evening with dim lighting and red lights to create a sensual environment. When connecting with your body, adding grounding by connecting with nature or connecting with a water element e.g., swimming in a lake/ocean or taking a shower is also beneficial.

**Garnet:**

To put it simply, the best kind of exercise is the one that you will actually do. It's important to find practical ways to make positive changes in your life, rather than idealistic ones that may not fit your lifestyle. However, even when we know what's good for us, it can be easy to fall back into old habits. In these situations, it's important to reignite our motivation and find a bridge back into compliance. One approach is to start small and be kind

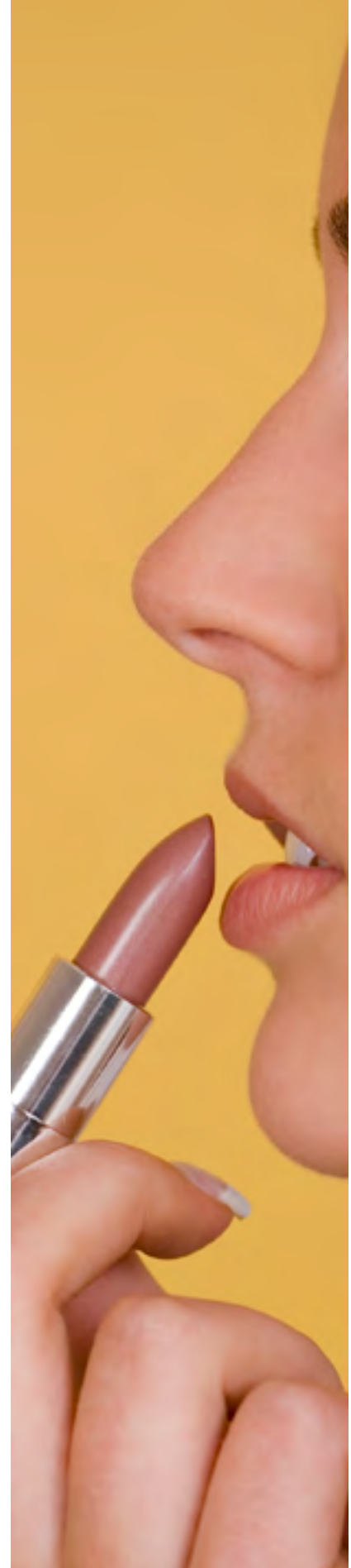
to ourselves, focusing on progress rather than perfection. It's also helpful to have a support system and to stay connected to our goals and reasons for making changes in the first place.

**Anna:**

We all have self-sabotaging tendencies due to the trauma-based society we live in. Stress is a major factor in our lives and it's important to understand where our self-worth comes from. Taking a pause is the most difficult thing to do, but it's necessary to tune into our emotions, body, and behavior patterns. When we become overwhelmed, we tend to stop doing things that support our well-being, such as grounding, breathwork, and neglect sleep. To reignite our good habits, we need to evaluate our priorities and determine what is important to us. We often get caught up in perfectionism, but it's important to do what's possible, even if it's just five minutes of grounding or a partial workout. Understanding ourselves and our priorities is key to making positive changes.

**Garnet:**

What is the purpose of pursuing this kind of embodiment work? It's a big question that could touch upon spirituality, existentialism, or the idea of a bartering system where people believe that if they do this, they will get what they want. So, why bother with this work? Is it simply to feel and look good, or is there a deeper motivation behind it?





**Anna:**

Certainly, the question of why we do things and what motivates us is deeply personal and individual. It's important for each person to reflect on their own values, desires, and goals in order to determine their own purpose in life. There are many ways to live a fulfilling life, and it ultimately depends on what resonates with each individual. It's important to understand ourselves and our own motivations in order to make choices that align with our own personal sense of purpose and fulfillment.

**Garnet:**

Do you believe that the key is to contribute, so that it

does not become egocentric or narcissistic despite being personally and professionally involved? From my perception of you, it seems that you want to share your experiences and insights with the motivation to help others.

**Anna:**

I was once told that not sharing the lessons we learn is selfish, and I believe in that. As humans, we are a product of the past and a building block for the future. We are grains of sand, but together we make Sahara. In other words, if we choose to contribute in a meaningful way and help ourselves and others, it can create a positive impact that

multiplies. I want to live a fulfilling life while also making a difference and leaving the world a better place. Biohacking is part of that for me, as it gives me the tools to optimize my health and contribute in a meaningful way.

**Garnet:**

I think it's a perfect point to say thank you. Thank you for having that attitude. Thank you for doing what you're doing. Thank you for carving out a little bit of time in your busy day. Thank you, Anna.

**Anna:**

Thank you so much for this insightful discussion, Garnet.



## ABOUT ANNA LINDFORS



*"Anna Lindfors is a biohacking Sexologist & Psychologist specializing in Sexological Therapy. Through her profession, Anna sees how prevalent challenges with sexuality are. Her passion is to help you reconnect with your vitality and bring back pleasure to ALL areas of life."*

*Anna's journey to becoming a sexologist started by navigating her own challenges. Being diagnosed with endometriosis at the age of 20, chronic pain and hormonal treatments shifted her from celebrating womanhood into problem-fixing mode. It was through biohacking endo into remission and reconnecting with her sensuality and femininity that empowered all aspects of her.*

*"Sexuality is our core, and that's why unlocking yourself sexually is so powerful and elevates your entire life."*

*During her postgraduate specialization in sexology, Anna developed the HEAL- method for holistic and effective client transformation. HEAL combines biohacking (e.g., meditation, grounding, breathwork) with integrative therapy methods in a 3-6 month process to transform your relationship with self and others. Sign up for the waitlist (new spots open in August 2023). Anna also speaks globally about changing our culture around sex and reconnecting with each other. She is also a co-author of the 'The Resilient Being' book.*

*Connect with anna on instagram [@healwithanna](https://www.instagram.com/healwithanna).*

# BRAIN PRIME & BRAIN TIME:



MANAGING BRAIN CHANGE





## PREFACE:

In the book "Principle of Psychology" written over 100 years ago, William James presented the first theory of neuroplasticity, suggesting that the human brain is capable of reorganizing. It was not until 1948 when the term Neuroplasticity was first used by a Polish Neuroscientist named Jerzy Konorski, who suggested that over time neurons that had 'coincidental activation due to the vicinity to the firing neuron would after time create plastic changes in the brain'. But it was not until the mid to latter half of the 20th century, following a wide range of research which showed that many aspects of the brain remain changeable even into adulthood, that the term Neuroplasticity came to prominence. (14)

Neuroplasticity, also referred to as brain plasticity, is a term used to describe changes to the brain that happen throughout the lifespan in response to new experiences. Latest research shows that brain development and behavior are guided by a basic genetic blueprint, in addition to a range of experiences and all that shapes the emerging brain. Even prenatal events could be a factor in the modification of neuronal connections. This notion contrasted with the previous scientific consensus that the brain develops during a critical period in early childhood then remains relatively unchangeable afterwards. (15) (16)

## INTRODUCTION:

No matter what the state of your brain today, it can be better tomorrow.

This is the perspective and promise of neuroplastic change dynamics in our adult human brain. In this article, we will explore this process in two broad and related neurological stages: Brain Prime and Brain Time.

The Brain Prime stage is the triggering aspect of neuroplastic brain change. It precedes the second stage called Brain Time. Brain Time is the integration process that results from the triggers created by Brain Prime.

## ABOUT BRAIN PRIME:

The Brain Prime stage is frequently referred to as Brain Priming. So, Brain Prime is the stage and Brain Priming is the action that takes place during that stage. In general terms, there are two types of "brain priming": 1) Psychological Priming and 2) Physiological Priming. Both are forms of "Brain Priming" while the psychological aims more for the cognitive aspects of memory and performance and the physiological more towards somatic processes. Certain methods can integrate the two forms in sequenced or overlapping methods. The Light/Sound NeuroVizr™ Experience acts predominantly in the second Physiological Priming type however the musical "Mood Framing" aspect of the associated soundscape combined with audio brain frequency signaling will also generate a specific psycho-emotional response that has a reasonable Psychological Priming effect.

"The general theory underlying priming is that the brain, which has been primed by a

prior method of activation, is generally more responsive to the accompanying training. Priming presupposes that enhanced neural activity prior to or during training can facilitate the acquisition of long-term potentiation- (LTP) or long-term depression- (LTD) like mechanisms." (1) (7)

Initial interest in priming was fueled by popular psychology research completed several decades ago that included the isolation of memory subtypes and examination of individuals with amnesia. (10)

"Priming" is a type of implicit learning wherein a stimulus prompts a change in behavior. Priming, which may occur after a single learning episode, is a type of implicit learning.

"Priming-induced learning is different from other types of implicit learning because skill-learning requires repeti-

tion. Studies of priming originated in psychology, but have since been investigated in neuroscience, neurorehabilitation, and cognitive neuroscience using behavioral and brain mapping techniques. These studies, both translational and clinical, have been examining ... priming as a tool for inducing neuroplasticity..." (1) (4)

The priming paradigms that are supported by the greatest amount of evidence are:

- 1) Energetic Stimulation - based (eg. electromagnetic);
- 2) Motor Imagery - based (eg. visualization/mental rehearsal);
- 3) Sensory - based (eg. light/sound activations - NeuroVizr™.);
- 4) Movement - based (eg. pre-task no-load movements);
- 5) Pharmacological - based (eg. ingested compounds). (1)

Priming, applied in both physiological and psychological tasks, is a technique whereby exposure to one stimulus influences a response to a subsequent stimulus, without necessarily induced conscious guidance or intention. (2) (3).

"Priming stimuli can be from the same modality as the accompanying task (modal-specific) or from a different modality (cross-modal). An example of modal-specific priming is bilateral mirror symmetrical movement (a form of movement-based priming) that is performed prior to a motor task practice and has been found to increase the rate of motor learning in neurologically healthy subjects. Cross-modal priming can also be used to enhance motor learning. For example, semantic priming, reading relevant words describing an action, can produce more efficient movements in young, neurologically healthy adults compared to a control condition." (1) (5) (6)

The discovery that the brain is plastic opens up the exciting possibility that clinical outcomes may be improved through the development of therapies that enhance plasticity and facilitate learning. Priming, in a neuromodulatory context, can be defined as enhancing the sensitivity of the brain to therapy using techniques that increase or decrease the excitability of the cortex. (13)

#### ABOUT BRAIN PRIME & NEUROVIZR™ EXPERIENCE:

The Light/Sound brain stimulation native to the NeuroVizr™



is intended to elicit a Brain Priming effect. The Brain Engagement principle inherent to the experience acts to trigger basic neuroplastic responses in the brain that open the neurological "doors" to reshaping both behaviors and structures in the brain. Combinations of focused attention, marginal demand and attractive subjective states act as positive "stressors" or "triggers" that induce a "readiness response" state in the brain that sets the stage for the resulting Brain Time dynamics.

Until the Brain Prime/Brain Time dynamic is appreciated, it seems counter-intuitive to state that the main neurological effect of the NeuroVizr™ Light/Sound Experience actually begins when the Light/Sound end. Obviously, the Brain Priming effects of the light/sound signaling are rich in immediate stimulation and satisfaction. By analogy, the attractive satisfaction of eating a delicious meal is easily evident however once the eating ends, the critical stage of digestion begins. Hence, the need to appreciate the relationship between Brain Prime and Brain Time.

Don't (neurologically) eat and run!

#### ABOUT BRAIN TIME:

The Brain Time stage follows and is a consequence of the Brain Prime stage described above. To put it very simply, if you do Brain Prime first - anything that follows works better.

The Brain Time dynamics have been studied and become better understood.





Neurologically, the processes have been recognized as occurring in four sequential "Activation" phases. These Activation phases are:

- 1) Neuro-Stimulation (the "input reaction"); 0 - 2 hours
- 2) Neuro-Modulation (the "reaction response"); 2 - 8 hours
- 3) Neuro-Relaxation (the "relief response"); 8 - 24 hours
- 4) Neuro-Differentiation (the "relief result") 24 - 48 hours

1) **Neuro-Stimulation:** (input reaction) 0 - 2 hours

- It is like giving information/food to a hungry brain.
- It has an appetite and is hungry for the info/food because it is the way it can keep the learning going and solve the problem.
- It is mandatory for self-organization and adaptation.
- It triggers a mobilization of self-regulation and things immediately begin to improve even at this very early stage.

- **SUMMARY:**

- INPUT creates a REACTION that triggers a mobilization of self-organization and adaptation.

2) **Neuro-Modulation:** (reaction response) 2 - 8 hours

- Now kicks into gear & all of the multiple Brain Networks have an improvement of functions.

- This decreases the super-sensitivities that have formed as the Brain has been lacking certain Adaptive responses.

- Allows the Brain Stem "Reticular Activating System" (RAS) to "reset" the "arousal level" & gets "calmed down" & normalized

- The brain can modulate its own functioning - balancing

excitation and inhibition.

- **SUMMARY:**

- RESPONSE to the INPUT REACTION to "reset" the "arousal level" and balance excitation & inhibition.

3) **Neuro-Relaxation:** (relief response) 8- 24 hours

- All the Brain Networks and associated circuits get to "Rest & Restore" themselves.

- Catching up on sleep is important for brain healing - in deep sleep it's known that the brain undergoes a sort of cellular clean-up process.

- This is great because now the (#2 above) Neuro-Modulation activities get to keep a t work by "flipping ON" many dormant circuits to engage in Movement, Mental and Sensory Neuroplastic stimulating signals.

- It is only with corrected self-regulation via brain modulation, brain rest, and adequate energy restored, can the brain rhythms be restored.

- This is the stage when a person has the chance of overcoming the maladaptive learning involved in PTSD as well as other mal-adaptations.

- **SUMMARY:**

- A RESPONSE of RELIEF permits "Rest & Restore" and a chance of overcoming the maladaptive learning

4) **Neuro-Differentiation:** (relief result) 24 - 48 hours

- The resultant long-lasting stage when enduring positive learning can be integrated into the Stable State brain functioning.

- Now the new habits can begin to take charge.

- The recovered brain is now in a position to start re-learning lost functions.

- Any learning process involves neuroplastic change.

- **SUMMARY:**

- The RESULT of RELIEF allows new habits to begin to take charge.

**SUMMARY REVIEW - 4 Activation Phases:**

1) INPUT creates a REACTION that triggers a mobilization of self-organization and adaptation.

2) RESPONSE to the INPUT REACTION to "reset" the "arousal level" and balance excitation & inhibition.

3) A RESPONSE of RELIEF permits "Rest & Restore" and a chance of overcoming the maladaptive learning

4) The RESULT of RELIEF allows new habits can begin to take charge.

**SUPER-SIMPLE SUMMARY REVIEW - 4 Activation Phases:**

1) INPUT triggers adaptation (Stimulation)

2) RESPONSE resets arousal levels (Modulation)

3) RELIEF permits "Rest & Restore" (Relaxation)

4) RESULT allows new habits (Differentiation)

**MORE ABOUT BRAIN TIME:**

One of the most intriguing aspects of the neurology of Brain Time is the evolving time line of the Activation phases. In simplicity, the markers of 2 hours, 8 hours, 24 hours and 48 hours jump out as a template for plotting the Brain Time interactions. It is apparent that the developing phases of the Brain Time Activation processes have a strong relationship to the natural Circadian cycle that acts to regulate



neuroplastic integration.

Consequently, we have four periods in which we can expect heightened communication and potential reinforcement of a beneficial neuroplastic change or effect:

- 1) 0 - 2 hours (the "Input Reaction" or Stimulation Phase)
- 2) 2 - 8 hours (the "Reaction Response or Modulation Phase)
- 3) 8 - 24 hours (the "Relief Response" or Relaxation Phase)
- 4) 24 - 48 hours (the "Relief Result" or Differentiation Phase)

In each of these phases, there is an opportunity to more successfully "imprint" neuroplastic information. The most impressionable phase is the

Stimulation phase in which the brain is highly sensitized to the information input. This Brain Time condition can be called "hyperplasticity" and is very pronounced in the immediate 1 to 2 hours following the initial Brain Prime stimulation.

The second Modulation phase (2 - 8 hours following the initial Brain Prime stimulation) is also a potent period for impressionable change because the vigilant "on guard" gates of arousal are softened and more accepting of possible change.

You can think of the following two phases (Relaxation, Differentiation) as sets of "rolling waves" of further maturing integration of the impressionable messaging that is introduced into the brain. Entering the

"sleep cycle" within the normal biological Circadian Cycle is an important if not critical element in beneficial neuroplastic change. Adequate restorative sleep is a key factor in maximizing the Brain Prime/Brain Time neuroplastic cascade of effects and is found in the third Activation phase of the "Relief Response/Relaxation". Each phase has its unique features (see above in the discussions and summaries) and will act to guide the brain into a thematic change derived from the specific messaging input.

### CONCLUSION:

To manage your brain change, understanding and applying the dynamics of Brain Prime and Brain Time is essential. Pos-





itive neuroplastic change in our adult brain is absolutely possible and requires an artful application of scientifically grounded methods. Using the NeuroVizr™ Light/Sound as a powerful and reliable Brain Prime experience opens the doors of a long list of possible Brain Time techniques and applications. Essentially, anything you do in your Brain Time after a NeuroVizr™ Brain Prime experience will work better. And that is good!

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## About Garnet Dupuis




*Garnet was born and raised in Canada and is a naturalized USA citizen. He is an Integrative Health and Wellness expert, teacher & inventor with specialties in inter-disciplinary methodologies. With a wide experience in advanced technologies, Garnet has taught neuromodulation applications in major USA universities, professional sports teams, the Marine Corp and Naval Hospitals and lectured in European and Asian countries.*

*Garnet has a broad education including college, university and graduate trainings in Classical and Clinical Homeopathy, Oriental Medicine, Massage Therapy/Bodywork, Hydrotherapy, Remedial Exercise, Biofeedback, Psychology and English Literature.*

*Garnet is co-founder of Lucid Studios/NeuroVizr™, Thailand. He currently resides in the tropical mountain rainforest in Northern Thailand. He is a life-long meditator and practitioner of Tibetan Dzogchen. Garnet is active in wild animal rescue and conservation and has built, manages and funds a sanctuary for SE Asian apes.*

*Website: <https://neurovizr.com/>*





# SUPERIOR HERBALISM & THE THREE TREASURES



The following article is taken from an insightful discussion between Garnet Dupuis and Ron Teeguarden.

**Garnet:**

Here I am with my dear friend and, honestly, soul brother. A few people have mistaken us for blood brothers at times in our lives, and that's an honor to me. Ron would be my big brother. There you go.

Now. Okay, so why are we doing this? Because there's an opportunity to introduce people to you, Ron, that may not know you and also may not know your work. Tell me a little bit about you: who you are, what you do, what you've done.

**Ron:**

Well, I've been involved with natural health, let's just say that. In parallel with that, I've been embedded in a kind of spiritual path of largely, but not exclusively, Asian philosophies. But I've studied with Rudolph Steiner.

I've been interested in the whole realm of the psyche, the mind evolving, becoming truly happy, but not through the hedonistic path of happiness. Although I'm not against the hedonistic path, it is part of a bigger path. Let's just say, I was a very dedicated science major.

**Garnet:**

I'd like to start by asking you to tell the story that you've told me recently. Let's get back to the theme of what's known as the Three Treasures.



**Ron:**

I had a master teaching me Daoism during the mid-seventies. Eventually, he taught me meditation techniques about the cosmos, the real meanings of Daoism, and tons of breathing movements. He taught me about what they called the tonic herbs. In Asian philosophy, they are actually called the superior herbs compared to the preventive herbs, which just prevent disease. Then there are remedial herbs, which you actually call the poisons in Asian medicine. Meaning you can take them for a disease, but you got to

take them at the right amount, at the right stuff, at the right time, and then stop. And so common people shouldn't be using that one.

**Garnet:**

So, there are three levels.

**Ron:**

Three levels.

**Garnet:**

This is one of the things that stands out the most. This perspective on herbology. In this case, principally Chinese, but Asian herbology, where there are medicinal herbs that are

kind of pharmaceuticals in the way that they are targeted towards certain actions and symptom controls.

**Ron:**  
That's right.

**Garnet:**  
And then you have a second class above that, but then you've got this superior class. This is one of the main messages I hope for people to absorb. So, talk a little bit about the three levels or classes of herbs. Well, because you're a master at the superior level, from what I understand.

**Ron:**  
Well, I would say that I understand all three levels extremely well out of expediency over the last 50 years. It's due to having had to deal with thousands and

thousands of clients who I can't call patients because I'm not a doctor, but they were people.

So Daoism was interested in promoting their health rather than waiting till you're sick. And so they would consume these herbs as part of their practice of evolving. The purpose was to live really long. It was to develop great longevity and unbelievable survivability, almost invincibility.

The herbs are fortifying and flexibility-enhancing. It's not just strength but adaptability, power, and real flexibility. Nowadays, they understand that these herbs, every one of them, all of the so-called tonic herbs, have bidirectional activity.

**Garnet:**  
Okay. Explain bidirectional, please.

**Ron:**  
It's a very uncommon thing in nature.

**Garnet:**  
There are a few basic principle concepts that everything else hangs upon. And one of them, in terms of herbology, is what you described. I'll say medicinal, preventative, and tonic herbs. Some years ago, admittedly, it gave me a perspective that I didn't have before. People had problems, and you treated them, and they got well. That's a different thing.

**Ron:**  
Yeah, that's lower medicine. And I'll just say that. Okay, so the lower medicine, the remedial ones, they have chemistry that's really powerful. And I will not ever say that these lower





class herbs are not miraculous. If you've got a disorder, they can really help you. But they're uni-directional.

**Garnet:**

Here's the point. Bidirectional and uni-directional.

**Ron:**

So, you have to understand that most herbs have one chemical, and then you have a container chemical that drives the body in one way or another. For example, makes it colder or improves circulation in some way. But these do not. They are one-directional. If you take too much of it, you can go too far.

They're medicine. There are drugs. This is what drugs do and what drugs are. They have to be titrated very carefully by a professional herbalist, a medicinal herbalist, or a doctor. In China, they're not called the inferior herbs. They're called poisons. And not that you wouldn't want to take 'em when you're sick - you do.

We'll skip over the preventative ones right now. Which are important. They have a nature of their own that fits in between.

The tonic herbs - all of them do one of two things. They're either bidirectional, regulatory, or they boost one of the Three Treasures. Almost all such

tonic herbs are safe because they have a vast array of components that come in pairs. They tend to work with each other and against each other. Yin and Yang. Sort of complementary opposites which are harmonious together to regulate functions.

So, these bidirectional herbs. There's only known to be about a hundred of these in the world that have these pure bidirectional properties. That's out of 300,000 known plants that humans can't eat without just dying on the spot or can adjust to get through the system. That's a lot of plants. There's just a hundred of them - 120, or maybe there's 200. Okay. It's a minuscule number. And then out of those, there are an elite 30 that are just unbelievably bidirectional.

But the big caveat to that is quality. We all know that good certain good things come from certain places. It's like there's a reason. And it's a lot of reasons on a micro scale, like the bees. That understanding is key. If everybody can walk away from this talk today knowing this - they should know where things come from and learn the things that matter to them in their life. They should get it from the places that are right for growing that.

**Garnet:**

You've mentioned it before, so I'm going to ask. I'd like you to talk about Three Treasures, please.





Ron:

So, back from the beginning of, even prior to the invention of herbs, there were discussions more than 3000 years ago about the energy within the human body. And they described three types of energy. So they said - the body is composed of what they call the Three Treasures. The reason they're called treasure was - these are worth more than anything else you got. This is your life and the parts of your life. So, these three

treasures are called Jing, Qi, and Shen in Chinese.

The first one I'm going to talk about is Qi. Everybody heard about Qi. It's like a go-to word. Okay, so everybody knows Qi is their energy. It's the energy you use to wiggle your fingers, think, talk, and perform every function of our body. Everything like that is run on a type of voltage or a level of energy that's flowing through our body. We remake it throughout our life through breathing and through eating.

It's the energy that we produce through breath - the oxygen and all that exchanging. So, it's the combination of the food we consume and the teas and the beverages and the tonics, and everything we consume through the digestive tract and through our lungs. All that goes into our body, blends together and creates what they call human Qi. So, that's our human Qi.

Qi is in our body, and we use it every day and then we have to sleep. Okay, so you rebuild your Qi while you're breathing, and eating. That's replenishable. It's a really cool thing as long as we have good food.

The problem is - emotions come along. We have emotions. They tighten up parts of the body for reasons that I'll talk about some other time. They can cause tension in your neck or someplace. These tension places block the flow of current, and that influences different areas in the body. That's what acupuncturists do - they put a needle in or do something to release that flow and allow the body energy to flow.

Acupuncture cannot increase your Qi. It can only improve the flow of Qi. What does increase your capacity are the foods you eat. Okay? So certain vegetables have a chemistry that produces Qi. Or our body uses it to enlighten our mitochondria and different functions somehow, release certain enzymes, and all of a sudden we get more Qi. So, these are called tonic herbs.



And we breathe. That's why breathing is so wonderful and important. That's also why exercise is so massive - because you can increase your volume, your capacity of how much you can hold and how quickly you can restore it. Even just deep breathing for three minutes right now would change your day. Okay. So, that's the Qi component. And so Qi is one of the Three Treasures.

The second one is called Jing. Jing is the energy that we inherit genetically from our parents and their lineage. It's the life force of our life. And that life force is inherited through billions of years, 4.2 billion years of life at least on this planet without interruption - from somebody, some creature. And we've inherited that force. We have it in our bodies.

We use up Jing over a lifetime, and that lifetime capacity is really pretty set in your genetics. That is genetic. It is really centered. It's actually collected and concentrated in our lower abdomen. Jing is something that we can easily use up by living a stressful life. Stress drains Jing. Okay? We just use it up.

Okay, so that's Jing and you have to restore it. Food is not a great source of Jing. The greatest sources of Jing are these superior herbs, the ones that are called Jing tonics.

**Garnet:**  
And the third type?

**Ron:**  
The third type of energy is what we all know of. It's called

Shen. This is our consciousness in our mind, our spiritual power. All of these things encompass our psychic knowledge and experience of the universe and what we put back into it. Shen is associated with the heart. It's also associated with being stored in the third eye.

It's a feeling of empowerment that is actually as old as the universe. This is the old one. So, Qi is - day-to-day, minute-to-minute. Jing - that's the life that's been coming along for a few billion years and we inherited it from our recent ancestors. But, Shen had come, and please don't laugh, but it emitted at the Big Bang. It is part of the deal.

It is an energy that we can tap into and it never goes away. We all have that much Shen. It's infinite. But Shen is delicate. And if we get emotional, we really let our anger or our frustration or our rage or our fear, and those are legitimate, terrible emotions. If they become chronic, you start forming an addiction to them.

We can do two things. We can sublimate the emotion some, and we can also start opening up. That's why people meditate. It is to open the Shen. Or they practice compassion. It's said - giving builds Shen. It's the oldest spiritual phrase in Asia. Giving builds Shen.

**Garnet:**  
I have to think about what begs to be said right now. It's because Shen sounds remarkable, as you say, fragile and all





these things. However, there are Shen herbs.

**Ron:**  
Yes, there are.

Okay, so let me just talk about the herbs. We've talked about Jing tonic herbs. You can go online, and you could get a list, and you get them and use them to keep a balance according to your nature. So, you're building your Jing, and you're building your Qi. But when it comes to Shen, you just want Shen to open up and build up. Those are called Shen opening herbs. But really, they're opening up your Shen because Shen can't be tonified. Your being, it's your universe; it's who you are. Even the worst demonic human being that's ever lived had Shen.

**Garnet:**  
What I'd like us to do now is round this up. What people will remember are the key points: three classes, bi-directional, Three Treasures, and the importance of the transitory nature of the constitutional quality of Jing that you don't want to squander. You can also build it. And this difficult-to-define quality of Shen. That is precious.

**Ron:**  
So the analogy that we use in Taoism, at least in my lineage, is that our life is like a candle. Okay? So, we are a candle. The wax and the physical parts of the candle that's our Jing. Okay? Let's say we're born as a birthday candle. You light that birthday candle, and it will last five

minutes while you blow it out, or it'll burn away. Such a short life little candle. Low Jing. Not too good.

But, if you get a big candle and you light it will go on for a long time. It's like a big, big Jing. You get the power. So, the physical candle is your Jing, and that determines how long you're going to live. Now you can protect it, you can put a little glass thing around it and keep the wind from blowing on it. That's your emotions and your stresses. If you protect it, it will last much longer. Now, the flame, that's Qi. In Daoism, we consider that a representation of our Qi.

So, you have to have Jing to have the flame in the candle. And if that's burning, then depending on how big the Jing candle was and how big the flame was, then you get light. And that light can light up a room, or it can light up the corner of the birthday cake. It depends on how big it is. And that's Shen. Okay? So the light given off is Shen.

You can't start by trying to build Shen by itself, at least according to our understanding. It's what a lot of people do. And of course, when people are really sick, and they're spiritual, and they're trying, they can build some Shen, or they can actually have Shen open. It's infinite - so it can open up. But the fact is, if you don't have a candle, it's not going to. The candle's going to go out.

**Garnet:**  
There's a stress-related psychological example that fits



# 精 氣 神

your candle analogy. The idea of burning your candle at both ends.

Ron:

Well, obviously, we've been singing that all our lives there, Garnet.

Garnet:

Yeah. You're pushing beyond your capacity, or you're in a

survival mode or et cetera, et cetera. I get the idea that I can pump out more flame by burning the candle at both ends as an analogy. That's a caution even in sports medicine - the understanding that by doing more, you don't get more. There's a curve that changes direction. So, you can have willpower, and you can push your way through a problem.

Ron:

That's my summary: you're going to live longer if you rely on the upper class of herbs - the superior. If you rely on just preventing

things. When you start to get sick, then you take the cold remedy. That's not bad. I would say that's good. But I think it's possible to go for a decade without having to take a lower-class herb. The medical types of drugs are a little bit draining of your Jing. You have to take 'em. They're great herbs. They save your life or make you comfortable, but they're still that.

If you base your approach on superior herbs, you'll live longer. You'll feel better, lighter, sharper. You won't degenerate. It creates happiness. And that's how superior herbalism works. Within that, you can actually eventually get to a place where you're doing Shen herbalism because you've built your Jing, Then you're just working on exploring the highest level of herbalism. That's Shen herbalism. That's life.

Garnet:

That's life. Period. That's life. Perfect.



# About Ron Teeguarden



*Ron Teeguarden is a well-known American herbalist who introduced Chinese tonic herbalism to the Western natural supplements industry. With extensive knowledge acquired from studying with a legendary Taoist master and working alongside renowned herbalists and scientists, he has combined traditional Asian health theories with the advanced scientific paradigm. Ron authored the first English language book on Chinese tonic herbs in 1982 and his teachings on the "Three Treasures" System have reached millions through his books, lectures, workshops, and company, Dragon Herbs. He has guided numerous athletes to win Olympic and X Games gold medals and aided many high-profile clients. Ron's dedication to sourcing superior natural materials and educating the public on becoming intelligent users of dietary supplements is geared towards breaking the chains of aging and degeneration to perform at an optimum level throughout a robust and lengthy lifetime.*



# CORE

*The turning point in the process of growing up is when you discover the core of strength within you that survives all hurt.*  
- Max Lerner





# EXCLUSIVE INTERVIEW

## GARNET DUPUIS

**CO-FOUNDER OF *LUCID STUDIOS*,  
CREATOR OF BRAIN ENGAGEMENT  
DEVICE - *NEUROVIZR™*, PROMINENT  
SPEAKER, BIOHACKER &  
INTEGRATIVE HEALTH EXPERT**



*\*Listen to this conversation on our  
podcast by scanning this QR code  
or clicking here*

Garnet was born and raised in Canada and is a naturalized USA citizen. He is an Integrative Health and Wellness expert, teacher & inventor with specialties in inter-disciplinary methodologies. With a wide experience in advanced technologies, Garnet has taught neuromodulation applications in major USA universities, professional sports teams, the *Marine Corp and Naval Hospitals and*



*lectured in European and Asian countries.*

*Garnet has a broad education including college, university and graduate trainings in Classical and Clinical Homeopathy, Oriental Medicine, Massage Therapy/Bodywork, Hydrotherapy, Remedial Exercise, Biofeedback, Psychology and English Literature.*

*Garnet is co-founder of Lucid Studios/NeuroVizr™, Thailand. He currently resides in the tropical mountain rainforest in Northern Thailand. He is a life-long meditator and practitioner of Tibetan Dzogchen. Garnet is active in wild animal rescue and conservation and has built, manages and funds a sanctuary for SE Asian apes.*

**Garnet, why did you start this and why you do what you do? What is your reason for waking up every day in the morning?**

Well, it would've been a choice to not do what I do. In my earliest memories, I was a shy kid. My threshold for stimulation apparently is pretty low, I guess some people call that being an 'energy sensitive' - I just say I'm not the guy that wants to jump off the bridge into the river first. I have always been sensitive to, or magnetized to, - what shall we call it? - consciousness, awareness, the divine, the sacred. I was raised a French Canadian, Roman Catholic, and I didn't know anybody that wasn't like that living in a farming community. I got many things out of my Catholicism in my early days. The thing that I can most easily identify is a moral, ethical perspective on things, which I think is very important. And the other is the sense of the sacred, having a kind of a myste-

rious quality. The mystical aspect of this thing, life or divinity or something. And that's never, ever gone away. What I do has been traced to that.

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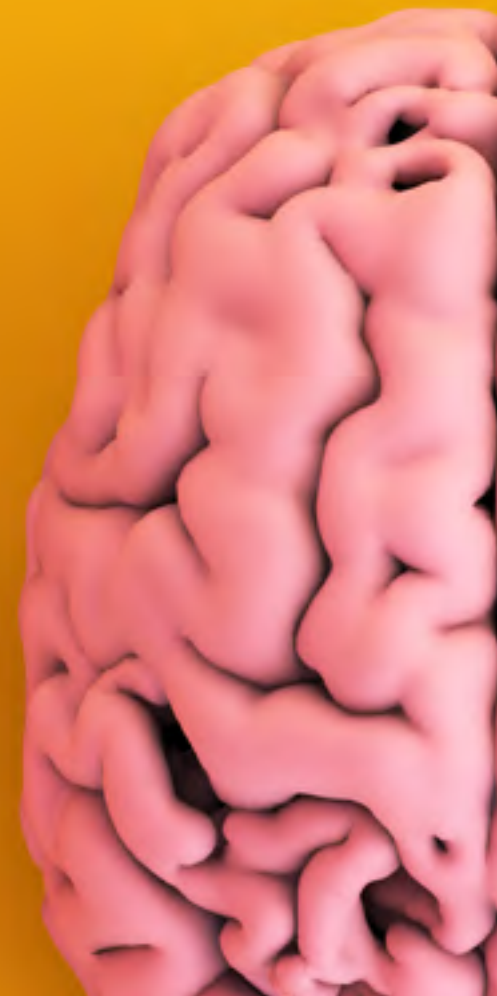
My first ethical teacher was my mother. She taught me disciplined kindness. These things are stamped in a person's psyche and they remain in mine. I'm really lucky to have that. Then came psychedelics and I loved it. I always had good experiences. I have nothing bad to reflect upon, although some people do but maybe I'm just a lucky guy, or let's say I'm blessed. Psychedelics were fantastic. Everybody smoked weed. It was a laugh, but psychedelics were the most attractive to me. And then after that, I thought, I'm going to find the way to get into my head and heart and soul or chakras, or whatever you want to call it. There was very little guidance at the time. I finished university in 1971 and two weeks after graduation, I was living in Isfahan, Iran. Why did I go there? Well, because I couldn't go to Mars. I just always had that appetite and it remains with me today.

It has never seemed like a choice. So I followed it. There was no guidance at the time, so

I started to focus on the body. There was just no reference at the time. I has led me into a life-long career where helping people seems normal and natural. I'm looking at any honest means of waking up, of becoming more clear minded and open-hearted. I do wild animal rescue conservation work in Thailand. I work with apes. I have them living with me and take care of their paralyzed arms and stuff. Why? Because it just feels both good and correct. So whatever I do, that's my thing.

**Very well said. When you were talking about the psychedelics and how you were experiencing them, was that when the idea struck you to want to do something with the effects that you're getting from the psychedelics?**

Well, yeah. Two things happened. One was that I became attracted to Eastern spiritual traditions because they seemed to deal with it more than my West-



ern traditions. And two, from the earliest days, I collected every little bit of technology that I could find or afford. I'd go in the dorm room or every house or something with my friends, and I had a bag of devices, tools, like the early strobe lights, early black lights, all these things. I had this appetite, this fascination. We didn't have much to really look at for the time. There was acid, which was the most convenient because it was synthesized. You could make it. There was some psilocybin around. So these spiritual traditions and these interests in psychedelics drew me to the state of the brain. Realizing that our brain is fully capable, not only capable, but designed to move out of an ordered state into a more disordered state, to move out of stabilized integration into rich information, adventure seeking cognition.

That's natural. The idea is we are supposed to go crazy (in a good

way) on a regular basis. We do it every circadian cycle, every 24 hours. We are biologically mandated to let go of cogent structure of pattern perception, of predictability. We're made to do that because when we do that, that's when we can work towards the resolution of experiences that quote 'don't make sense at the time'. So they emerge in our dreams. We've got waking state and we've got sleeping state, and within the sleeping state, we have sleeping dreams and within the waking state we have waking dreams. Our culture does not support the waking dreams thing.

This is my opinion, that the psychedelic compound does not make the experience happen. It facilitates a shift in the brain. And the brain makes it happen. There's a big difference there. If you know the entropic brain theory from Robin L. Carhart-Harris it's an appreciation that in evolution, there's an old brain, which is really good at bottom up information sourcing. So over time, the neocortex, the new brain comes along and says, 'Hey, I know what to do. I can use this information not for just momentary present experience, but I can catalog this. I can make a library of experienc-

es and I can notice similarities and dissimilarities so I can keep a library here and use that library to help you predict expectation or the future.' So in that process, you have to have information that passed from the top down. The old brain is a bottom-up sensory information-rich blast that is always going on. The top down new brain is that library of collected experience that gives you the ability to predict or project; to anticipate how to deal with it.

The fascinating thing is that the bottom up sensory experience exists only in the present moment and the top down library, prediction maker lives only in reference to the past with an expectation of the future. The new brain is always jumping to conclusions. Our brain is a combination of trial and error and jumping to conclusions, right? So we have this thing called a confirmation bias. We want our expected projected reality. We want it to be correct. Sometimes it is, sometimes it isn't. That's the problem.

You bring up a lot of interesting points there, Garnet. It makes me think of the book, "Influence: The Psychology of Persuasion" by Robert B Cialdini. He talks in the beginning of the book about a little bit of what you're saying, that as a species, because of our stimulatory environment, we always try to predict or always try to be on autopilot to save us from the overstimulation. But in a way people can use that to their advantage to, reel us in to do certain things. So its important to be aware. So to help with this problem, you created this NEUROVIZR™ device. Can you tell me how this works to help with the problem?

I was aware and used brain entrainment devices 40 years ago. The principle really hasn't







changed; brain entrainment is that repetitive signaling, the so-called frequency following response. That's what it's based on. That was discovered in the 1930s. Nobody knew what to do with it. And by the late sixties, it emerged again, partly because of technology, partly because of psychedelics and so on. Anyway, brain entrainment is a top-down process. Neurologically, it impresses experience upon the brain and then the brain will tend to follow that because of the neurological impulse. I don't do that, although I use elements like that

here and there. I do something different. I'm not the first, but I'm the first in a contemporary sense that I've given it a name. I call it 'brain engagement', not brain entrainment, brain engagement. I call it brain engagement because of the principles that are evident in neuroplastic change. You have to engage the brain for a neuroplastic change. You have to stimulate its attention and that attention must be sustained. There must also be what's called marginal demand. These things are cardinal to any neuroplastic methodology. That's not characteristic to brain entrainment.

Concerning psychedelics, generally speaking, they are like a car, maybe a really good car with no steering wheel. So, you got a brake, you got an accelerator but no control. That's why the element of set and setting emerged as wisdom. The set is when you look at where you are in your head and heart space before you do it. The setting is who you're with and where you are. So the NEUROVIZR™ has a lot of mixed



elements. Primarily it acts to engage the brain. I have interesting ways of doing that with signaling.

If you order something online, does it really matter to you whether FedEx or DHL brings it to the door? I'll take a guess that getting it is more important. You don't really care whether it's a brown van or a yellow one or whatever. So, I would say that our brain is designed to be sensitive to a variety of agents to engender the same endpoint action. Our brain is supposed to be able to let go for short periods of time and gather information without much bias, without much determination. We have to be able to let go enough so that we have fresh information that is not bound so much by our confirmation bias.

We need to be able to project or predict, but we also have to be sensitive to what technically is called prediction errors. A short example, I'm walking in my garden or in the mountains. I look down, I see a snake and I react. And then I look down again, and it's just my old garden hose. So I have a catalog of experience. I think some of it is probably ancestral and genetic, but most of us will respond to the sudden surprise of a snake near our feet and yet that wasn't a snake. That was a garden hose, but something reminded me of a snake. That's where I have a pre-



diction that when information comes flowing up, bottom-up, if there's a snake, I get triggered. But that's a prediction error. The question is, in our life when we encounter prediction errors where the experience that we're having in the present doesn't it really match our library what do we do about that? Do we update the library or do we delete that experience? Because our library is precious to us, right? We want our beliefs, our reality to be correct, but it isn't always correct. Well, that is life. That's why I think this is important.

Is the NeuroVizr™ then designed to help with those prediction errors?

Yes. It's a kind of brain exercise. It exercises the brain's ability to accept information at a more honest level. The thing is, you can't go from old order to new order directly. You can't go from what you don't know to what you do know without a process because our brain, and this is a really positive thing, has to keep a very good library of experience to base its predictions so that they're successful, they're correct. It's really important. It's not only a good thing, it's a precious and mandatory thing, but at the same time, we can become rigid, whether you want to call it a belief, whether you want call it a perception or a habit or a behavior, etc., we want that to have integrity, but we don't want it to be rigid. The problem is that the brain loves to make patterns.

The new brain, the neocortex, is especially good at creating a library. And yet what's the big news in neuroscience? The adult brain is fully capable of neuroplastic change; Change as an adult. So what does that imply? Well, by a time of your adulthood, you have a lot of patterns in your library. A lot. And yet your brain apparently is still capable of change, meaning it's capable not just of new learning, but relearning what it thought it knew that needs to be updated. We need to adapt.

Call it what you want - Grow. Learn. Do you stop learning when you're an adult? Do you think everything you've ever known is absolutely correct for the rest of your life? No. So here

we have this competition in the brain. Part of the brain wants to keep its patterns for predictability. Another part of the brain says, 'Hey, loosen up. You've got some learning to do.' Some of the things that need to change are locked into a past that is no longer valid. And you got to get updated. So how do you go from a rigid pattern to a new adaptive pattern? That's the trick. We all want change. To me, the most provocative question of all is how do I change? What are the





two things that make me want to change? Suffering makes me want to change. I don't like pain. So pain says, 'Don't do this. It's hurting.' The other one is pleasure. It says, 'Hey, there's all this reward here. Don't you want some of that?' I think that's just biologically innate. So to me, the question is how to change? And I don't think there's one answer to how, but I present a method with the NEUROVIZR™. And other people do it in different ways. There are lots of agents and what's the most important agent? What's the best agent? I can tell you that it's the one you're actually going to do.

Right. Of course. You said that the user in a sense has to be open to it has to know that they don't know everything in life and also to know that they don't have to learn everything all at one time. There's a great quote from Socrates that says, "If there's one thing I know, it's that I know nothing." Well this is sort of that same mentality. You're always open to new information and going back and refining those old connections. What type of mindset should a user have in order to be ready to take on these methodologies of Brain Change?

Well, very briefly, there are three things you have to have for a neuroplastic method. There's also a fourth that I'll call the secret sauce. Firstly, It requires sustained attention. Secondly, it requires what I'll call marginal demand. The third one, it has a lot of words. It can be called faith or belief or open-mindedness. The fourth thing is enjoyment. All these things work better if you enjoy it. There is a very complex neurochemical state called enjoyment.

Remember that library that we talked about? it's held together by a kind of neurological glue.



And I'm only using that metaphorically because it's not really glue, but it behaves like glue. It holds it together. Let's imagine you take a whole bunch of toothpicks and you put them in warm honey according to a pattern that you want. Then the honey goes in the refrigerator, then you take out the jar of honey and you want to change the pattern of the toothpicks, the synaptic patterns, right? Well, you got a problem because the honey is rock hard. So I want to change the pattern of the toothpicks. What's my problem? I've got to soften the glue of habitual pattern. I have to warm up the honey and then when the honey is soft enough, I can rearrange the rearrange the toothpicks. You can't just change an old ordered pattern into a new changed pattern directly.

There's a process that is required. You could say you have to go from an ordered state into somewhat of a disordered state. And then in that disordered state, which is information-rich, you gather something and you bring that back into the process that allows you to modify it. But I think this is one of the most important things, that sheer desire for change is not enough. It sets the stage.

The brain always looks for signal and noise. So when you create noisiness, one is it starts to interrupt what your brain is normally doing. Number two, it creates an appetite for the signal. There are ways where you do this bridging process of beginning to soften the glue and then getting the glue to move and then starting to move the toothpicks around so that you have an adaptive change.

In your body, you've only got so much blood, you can only allocate the blood to different muscles or



organs, depending on your activity. You don't have enough blood to do everything you want at one time. Similarly, in the brain, we don't have enough metabolic resource. You could say energy, but it's more than that. We don't have enough metabolic resource to do everything we want at one time. So there is an innate competition in the brain. There's a competitive resource to maintain a pattern, and a resource to create a new pattern. Habits don't like to change - that's a good thing; that's

a bad thing. It's just what it is. I sometimes call the NEUROVIZR™, brain exercise disguised as entertainment. The entertainment means it's attractive, it's enjoyable, but the idea is how to help.

If you've never done a back-bend, I would advise you to have some back massage or some thermal warm-up or somebody to kind of hold you when starting out. You lay in bed on your right side, it feels totally fine. Now you get uncomfortable and want to



lay on your left side. You can't go directly from your right side to your left side. You got to do this thing called 'rolling over' And rolling over has a high degree of unpredictability in it. You think, 'well, I know how to roll over', and you do it, but your foot get caught in the blanket or your pillow moves, or your wife says, "Hey, shut up." There's a process that we have to surrender to with a great deal of uncertainty so that we can arrive at a modified improved state.

To me, that's why the psychedelic thing is fascinating, but so are meditative and yogic techniques or contemplative techniques or extreme exercise or cold baths. All these things are ways that help us make the change we want. So with the NEUROVIZR™, I have these vectors, where the process ends up targeting what I'll call a probability state, which is one of the big differences of using a psychedelic compound. For the psychedelic compound, that targeted endpoint might be based in intention. It may be guided by a therapist or your buddy or your dog, whatever. Now combining the destabilization with these fancy things called strange attractors and inducing conflict makes this whole process a neurological process. It points towards a probability state and one of the most important elements is, that willingness, that openness to change. These are the domains that I work in. These are the things that fascinate me in every way.

Yeah. I've been lost my whole life. I'm a very good driver. I started driving tractors in the field at seven years old, but I've never really had a good sense of direction. Having a template, having something that helps us not go crazy in a bad way is brilliant. Technically these are called reliable

priors these are the priors that we hold as the cookie cutter for projecting and predicting They are reliable priors and unreliable priors. If you encounter an experience that is actually saying 'prediction error, prediction error', but the prediction is one of the ones you love and it's a reliable prior, the tendency is to ignore the experience, ignore the information, even though it's conflicted. We have to understand that not everything we think is true. To begin with, not every thought is accurate. In this very moment, at any point in your life, how do you relate to the experience? Stanislav Grof, a brilliant researcher says, "The only way to have an experience is to experience the experience." Now, that's pretty honest stuff because when we have an experience, it goes through all of these filters looking at the priors, noting if they are reliable or unreliable and questioning if we believe this or not? For people that have suffered, significant trauma, P T S D, if something even slightly reminds them of the original trauma the amygdala blaring alert goes off and everything freezes. And that information does not make its way up into reintegra-





tion. They are locked. They cannot access present proof. The proof of the moment. They can't reference real bottom-up sensory experience. You can't think your way out of a panic attack. The circuit is responsive at a fear level. And by doing certain things, I have some sessions that help do this, you can activate the courage circuit because you're in a fear circuit. But remember, you can't go from your right side to your left side directly. There's a process. So it's possible to process a person to move out of the fear circuit and into the courage circuit. My heartfelt hope is to find something that works without unreasonable levels of expectation and demand. That's why I created the NEUROVIZR™. Its practical for just about anyone out there.

Garnet, you were gracious enough to send me a device and I tried it last night actually. I went through the first part of the program, which is great for everyone listening. It's really interesting. I'm usually more of a sensitive person to light so I set the light sensitivity to level two. The entire experience was surreal. I did feel that sense of a slight

demand on my brain. Part of me wanted to take it off, to be honest. But the other part of me was telling me, 'just keep going, enjoy it'. At the end, I felt almost like a reward of going through it. I know it was only one session, but this morning, I got a lot of work done. I was productive. I didn't feel tired. So short term use I give it a good grade and everything. I can't wait to use it more. Let's talk a little bit about the methodology of this device in terms of the light and sound and then the different programs that people can choose from for their lifestyle.

Well, let's start off with an analogy, a four piece rock band. I use the soundscape to describe the drummer and the bass player in the rock band. It's designed to hold it together to create technically what's called a vector. It's going to keep moving in a certain way, even though it's not entrainment, it has something that is attractive. The very first thing that I do when I make a session is I decide what's the probability state? What help will this yield? So the first thing I do is I look for musical qualities, but not composed music. Technically it's called mood framing. What kind of emotive state would work well with creativity or deep sleep or focus. Music is the best evidence of what we have as brain language. The brain loves to do it and loves to enjoy it. You don't have to be smart to enjoy music. As a matter of fact, sometimes ideas get in the way.

Then I layer the mood framing with the main attractors in the brain signaling, and I'll use iso chronics, maybe some binaurals and now you've got the drummer and the bass player. Then after I complete that whole thing, and I'm satisfied with it in terms of its vector, its probability state, I use





the light like the lead guitarist and the vocalist. This is where a lot of the flourishing and dynamics and explorations and moving in and out of pitch and changing rhythms happen. They're permitted that because they are grounded in the base and drum. So the soundscape is the main driver and the light choreography is actually the complex signaling for the activity. So these things are totally interrelated. So when I do these things, understand that there is a dynamic relationship between soundscape and the light choreography. That's one thing.

So the idea is, first of all, you have to engage, you have to have an attention. So there's some signaling that just says, 'Ooh, what's that?' Then as soon as I get attention, I destabilize things. I mix it up. I create a very noisy signal and noisy brain, and the brain is like, 'oh, what's that?' But it's not long that it creates an appetite for something. It recognizes it

and creates an appetite. It's like if you're disoriented and there's that feeling of 'what's going on?' That appetite is uncomfortable for most people. Kids love it. That's why they spin around and around and around. They love that disorientation feeling because it's fun... if you let go. So you have to have that destabilization process that creates an appetite. So you're more open to signaling that is not comfortable for you, because you're hungry for signaling. The brain doesn't like destabilization. So at that point, I say, 'here, eat some of this.' And you go, 'ah, I'm hungry.' And you think 'that's not bad.' And I say, 'yeah and here's another one.' And then as soon as the brain starts to say, 'oh, yeah, I really get that,' I present conflict. Its like movies; if you want to know more about a character, what do you do if you're a screenplay writer? You introduce conflict. Then you see things about their personality that are revealed when there's conflict.

So as the brain is liking something, I push it and create conflict. I see whether the brain is actually committing to this signal. If you're riding a bicycle, do you balance so well that I could push you from the side and you don't crash? Can you reorient yourself? So there's a testing of the process. There's a challenge.

I'll say one more technical thing. It's called the strange attractor. There's a seed there. If you take a wooden bowl and a marble you push it, it'll go around and round and round but eventually the strange attractor, called gravity, will bring the marble to the bottom of the bowl and it'll just stay there. So, in that conflict, you seed it with the correct vector, you seed it in the conflict. It's actually called deterministic chaos. And then right after the conflict, you reintroduce it like a plain fact; here it is. And then the brain goes, 'oh yeah, I thought it was that.' And it starts to stay with it. And then you just reward the heck out of it. You just give it a lot of glory, and then you end the session.

Our brain is physical. I like the idea of stimulating or training, or exercising my brain. Speaking in relation to Neuroplasticity, your brain changes what matters to you. The brain changes what matters. How do you know what matters? Well, you're either punished without it or rewarded with it, so the brain changes what matters. What matters to you is where you will put your attention. The attention shifts to the flow of experience as it's occurring. And you're not working with prediction anymore. You're not working with expectation and confirmation bias anymore. You're not having to mentally re-assign focus.

There's a different quality that happens. And that's the basic



switch from a predominantly top-down deterministic concentrated action to a bottom-up open flow of experience. Its kind of like going from a macro lens on your camera to a wide angle lens. It's a shift. Neurologically, you can't separate bottom-up and top-down. It's a feedback loop. I work predominantly with bottom-up experience integrated with some top-down elements. Learning how to work with the brain, how to get a brain to change that resists changing - that's a fascinating topic to me.

So in a sense, you would like to help people reach this level of being able to help change their brain in a healthy way. There you have different programs that are geared on this device towards different lifestyles or different desires that people want. I know I saw one that was for sleep. Another one was more related to focus. Can you expand a little bit about those programs?

Yeah. First of all, it's not for everybody because, it's not a medical device and persons that are prone to seizures should not use this or any other pulsing device. This is even true in VR, is true and gaming software. Of course, there are people that should not do it because it can trigger a seizure minor or major. There are people that are photosensitive and they don't know it. It's like an unknown food allergy. Now, fortunately, it's a very small fraction of general population. I have to say that because I respect that.

There are sessions that work to help activate the courage circuit. People that suffer previous fear and trauma have this particular circumstance. Then there are other ones, people in neurofeedback see this a lot. You look at a profile and there's rigidity, a rigid pattern that just won't change





and it frustrates the hell out of the neurofeedback therapist and the person, so I have these dehabitators and there's some other ones coming. I'm in a position now where I have enough sessions of different purposes where I can create recommendations and protocols and that's going to make life a lot easier. Right now in the commercial app, we have what's called the 'Brain Gym', which is like stupidly important and good at a fundamental level, but nobody really knows how to use it or when to use it. Then I have this collection called 'Mind States' that point towards things and have names that pretty much explain what it could be.

Then also there's better sleep. I've organized and created new processes that are recommended for certain times of the day and everything. One of the most common reports, regardless of what sessions people are using, is that people sleep better. Actually you printed it in your magazine. I call it, "The Fourth State Deficiency Syndrome." I think



in our circadian cycle, we need these things. They're healthy. You can make any animal sick, torture or kill them, including humans, if you don't allow them enough time in the circadian cycle rhythms.

The waking dreams are dramatically insufficient in our society, we don't reward it. We don't think about it. So I My Theory is that there are other like neurohormonal elements, but with the NEUROVIZR™, most of the ses-

sions more or less allow a person to enter into that kind of nether world of waking dreams where they're conscious. But it's unusual. It's uncommon. It's an altered state. It's a little psychedelic in that sense that it's uncommon. And I think I have to say, just because a state is uncommon does not make it abnormal. I'll say that again. It's a really important thing for all of us. Just because a state is uncommon does not make it abnormal. If the uncommon starts to become common, then you





might be crazy. So what I've seen is an evolution within these past few years of the creative process.

So thank you, is my interpretation on it. I get more than satisfaction in doing this. I get reward and I'd rather have the carrot than the stick because there's enough stick in anybody's life. To be motivated by an aversion to suffering in pain is understandable; but to be motivated by reward and clarity and compassion, that's the life.

I love that attitude. I have to say for everyone out there, you got to check this NEUROVIZR™ device out. I've tried it once and I'm already so ecstatic to try it again. Garnet, where can people find out more?

Neurovizr.com is the website. One of the most important changes in my life is when I was teaching a lot. One day I realized that people were not coming to me for my teaching. I thought they were, I had a misconception. I had to recognize a series of prediction errors. What I began to realize is that they were coming there to experience their own learning, and that I should join them in the learning experience instead of coercing them to join me in my teaching. So why am I saying this? I'd love to keep on learning. I would be ecstatic that this becomes more of a group experience, group creativity. I'd love to work with bright minded, good-hearted, creative people. I'm sure there are people out there that with the tools and the access that can do it better

than me. That's what every teacher wants. They want students to be better than them.

The NEUROVIZR™ is mostly on the wellness side of things, and it's getting more and more clinical. I think I'm going to create a pro version for people that use it professionally and not personally. Then there's also the very delicious world of entertainment, mind expansion, exploration, that deserves attention, so stay tuned for that.

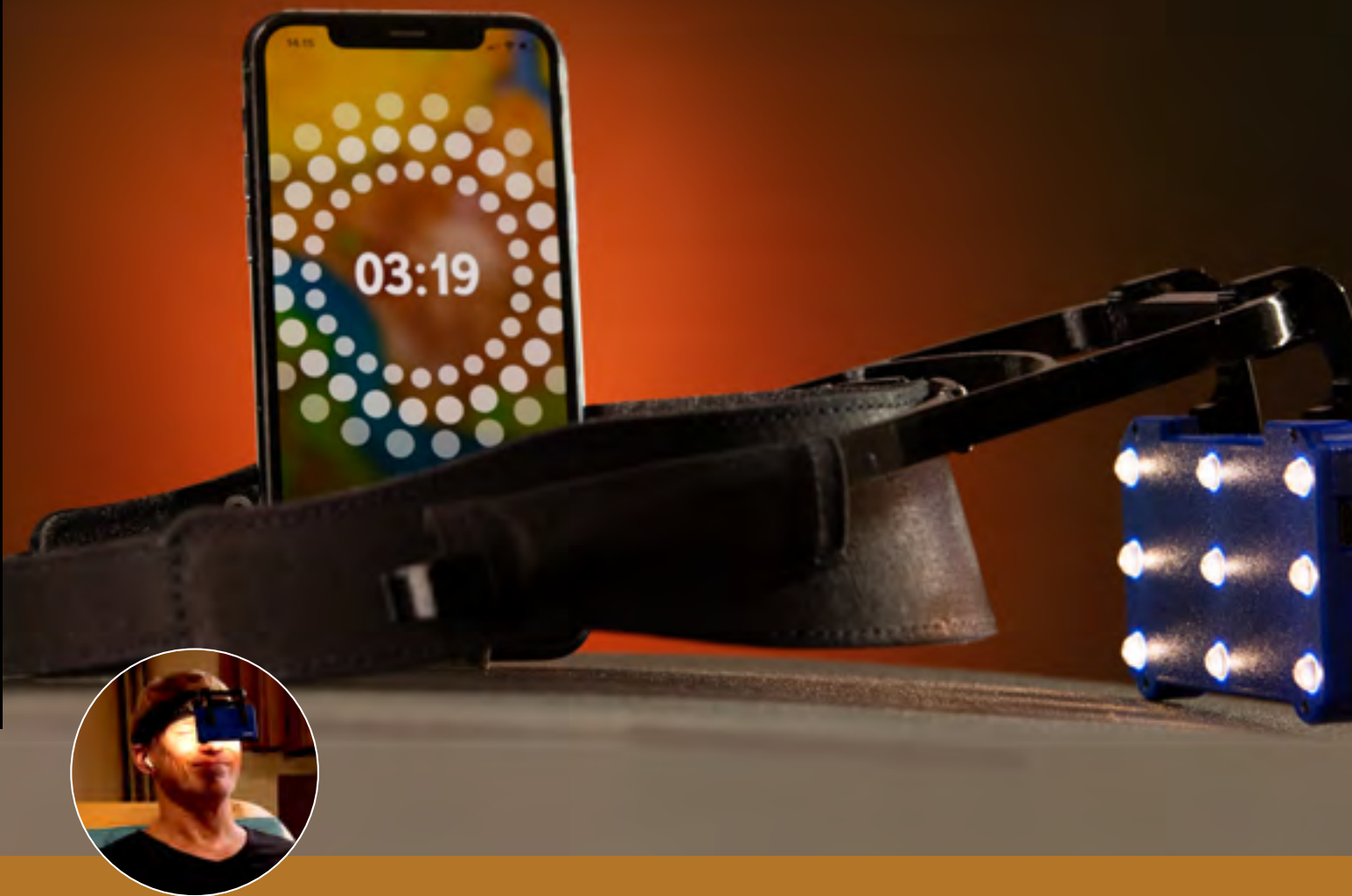
I know I've learned a lot here today, so Garnet, I have to say it's been a pleasure and I'm definitely looking forward to talking more.

Anytime buddy.



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Chief Operations Officer, Jean Fallacara  
Editor in Chief, Dallas McClain  
Marketing Executive Director, Arjun Chauhan

## THE WRITERS

The Cyborggainz Media Team

Andreas Breitfeld - Content Contributor

Dr. Larry Payne - Content Contributor

Anna Lindfors - Content Contributor

Ron Teeguarden- Content Contributor

## SIGNIFICANT CONTRIBUTORS

Designer, Andres Nuñez

Expert, GARNET DUPUIS, Brain Engagement Expert

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Known as Cyborgainz, born in France, Jean is an athlete, entrepreneur, scientist, public speaker and an Art collector. He is the founder and CEO of CyborgMedia, the Managing Director at inTEST Corporation and the COO of Biohackers Update Magazine. He is also the author of "Neuroscience Calisthenics: Hijack your Body Clock." Jean holds a bachelor's degree in biochemistry, a master's degree in immunology and genetics, and an engineering degree in biotechnology. He has also studied neurosciences and brain functionalities, and law and finances. Jean recently graduated from the MIT in XR-VR-MR. He is currently living in between Boston and Montreal after his biotech company was acquired by inTEST Corp (NYSE:INTT) in October 2021.

Website: [jeanfallacara.com](http://jeanfallacara.com) / Website: [cyborggainz.com](http://cyborggainz.com)



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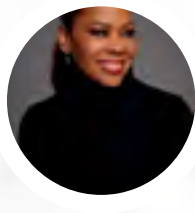


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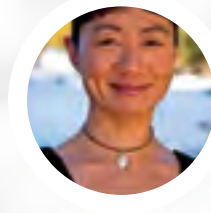
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