

# BIOHACKERS

MAGAZINE

## DR ALAN BAUMAN

ISSUE 15

**SPECIAL EDITION:  
Biohacking Baldness**

**EXCLUSIVE INTERVIEW  
LEADING BOARD CERTIFIED  
HAIR RESTORATION  
PHYSICIAN & FOUNDER OF  
BAUMAN MEDICAL**

**PIONEER OF NUMEROUS  
TECHNOLOGIES LIKE  
FUE FOLLICULAR UNIT  
EXTRACTION, LOW-  
LEVEL LASER THERAPY,  
PRP PLATELET RICH  
PLASMA & MORE!**

**Also In Our JUNE Edition:**

- THE FORGOTTEN FOURTH STATE OF CONSCIOUSNESS

- 7 BENEFITS OF COLD SHOWERS

- THE BIG BIOHACKING BANG

- AND MUCH MORE!

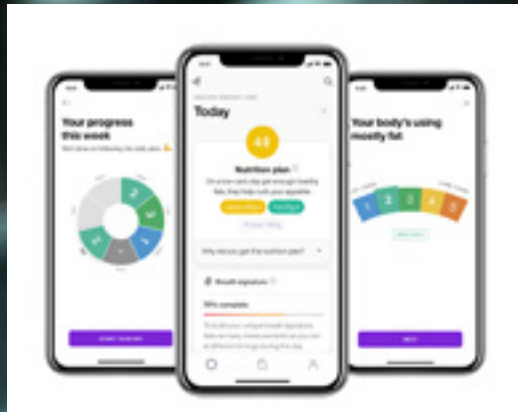
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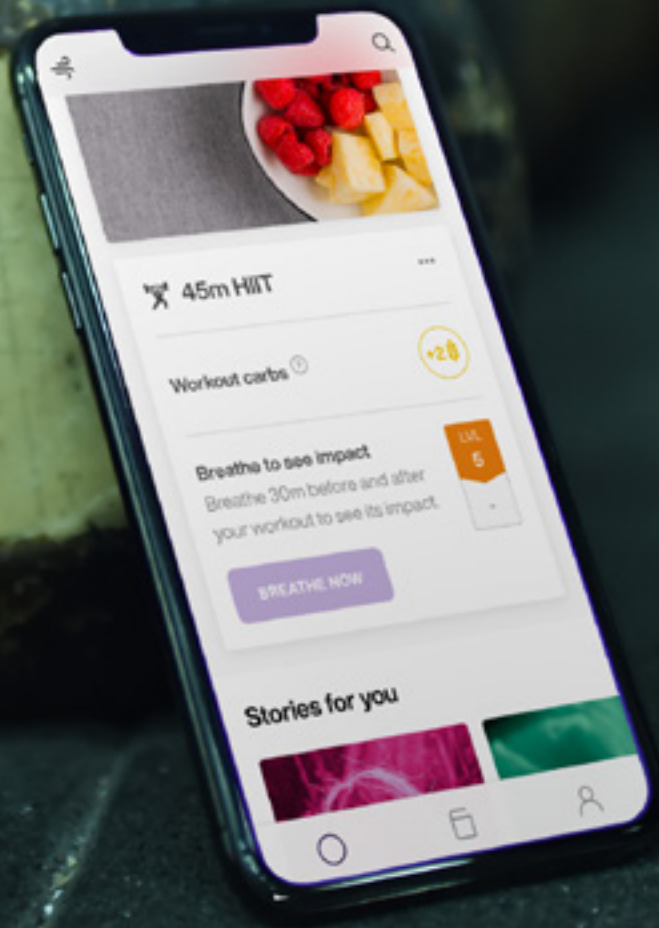
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## Our Categories

Our categories bring you quality content in a clear, swift order, based off pure simplicity and experience.

Outer – This branch contains concise and ‘to the point’ articles that just touch the surface of what biohacking is as a subject while relating to everyday life and how biohacking fits in.

Inner – This category takes a deeper and more scientific approach to biohacking. These articles focus on a more scientific and analytical theme of biohacking, breaking down more of the whys and hows behind it all.

Core – Within this sphere lie many specific and perhaps relatively new biohacking articles, all backed by science and studies, many of which are written by experts in their relative field. These articles bring it all back to the big WHY behind biohacking while connecting it to all the facts.



# MESSAGES FROM OUR BIOHACKING TEAM

# A LETTER FROM THE EDITOR

In a world with so much information that is continually thrown at us, sometimes it's tough to know what to accept as Truth and what to reject as false. So many things call for our attention that we can become mentally strained and exhausted by the end of the day. Because of this, we are susceptible to the coaxing idea of giving up our thinking, especially our critical thinking. We know we can't think about every little thing and decision that crosses our mind throughout the day, so we have many of our thoughts on auto pilot – which is fine, as this helps us from becoming absolutely drained by the end of our day. The problem arises when we let this auto-thinking expand to beyond the everyday task level of thinking and decision-making. Out of comfort, we can allow ideas and words that flash before us throughout our daily lives, to merge into our inner brain's reservoir without first weighing the information against our experiences and own inner knowledge of our understanding of the Truth. This is essentially when we let others that generate ideas, thoughts, agendas, etc. think for ourselves because we simply feel too overloaded with the amount of information, we have to continually process that we give up our own free right to ponder something. Its quite scary when we think about the ramifications that can come of this, especially when the world today shows us that those that don't think for themselves, are perfect subjects to a form of modern-day slavery to whatever ideas and reality the powers want to build up.

This is why its so important to take the time to invest in ourselves from the beginning and make learning, reading, and curiosity a habit. It takes

time but the earlier we begin, the more time we save in the long run from having to put great time and attention into each thought that enters our mind and decide whether it fits with our values or not. We must be like children, constantly questioning the world and using our forged experiences to add to our answers and depth of self-knowledge. In the same manner, we must respectfully study and learn from all those who have gone before us and be open to learning of their ways and perspectives.

Remember that knowledge is not solely subjective; it is also objective and is the understanding of a real, concrete thing under the aspect of a grasped meaning. We use our intellect to study and think rationally about things, which adds to our understanding of the truth about ourselves, our community, and our world. Our choices that we make are dependent upon our will (whether good or bad), which is in turn dependent upon our understanding of the truth. Man is the only animal that can say "I eat, and I know that I eat. I am, and I know that I am. I think, and I know that I think." To know, we must think critically about subjects that truly hold value. We must make the most of our intellect and discover new data from our experiments from biohacking to add to our knowledge in the search for the truth that propels all us humans forward to the beat of Life's constant drum.

*"If you look for truth, you may find comfort in the end; if you look for comfort you will not get either comfort or truth, only soft soap and wishful thinking to begin, and in the end, despair." - C.S. Lewis*

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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. Dallas can best be reached at his email: [dallas.biohackersupdate.com@gmail.com](mailto:dallas.biohackersupdate.com@gmail.com)

# A MESSAGE FROM COO JEAN FALLACARA

Is *Biohacking* a positive word?

Nowadays Biohacking seems to be perceived as uncanny. For some it is so mysterious, strange or unfamiliar that it seems supernatural.

In essence, we are here to create the experience and take something unfamiliar for many to make it familiar, accessible and understandable by all.

We are dreaming of seeing Biohacking perceived as an unrepressed emotional state that teeters humanity on the very edge of reality....

It always a nice helpful reminder that Health is the New Wealth!



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## ABOUT JEAN FALLACARA

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Born in France, Jean is an athlete, entrepreneur, scientist, public speaker and an Art collector. He is the founder and CEO of Cyborggainz, 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. 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)

# ARJUN'S STATEMENT

"If you want to find the secrets of the universe, think in terms of energy, frequency, and vibration." Nikola Tesla.

We are all made of energy, the food we eat, the air we breathe and everything we absorb becomes energy. Now what we absorb as living beings defines the type of energy we create and store. Good food and environment create good and positive energy, bad food and environment lead to negative energy.

Accumulation of too much bad energy in the body causes illness, it can be one of the reasons why almost everyone is suffering from something or the other. You will hardly find anyone who says they are healthy or free of illness, everyone has something, be it mental health problems, digestive, diabetes, or any of the fatal ones.

To exist in the universe, we need to understand its language, learn about energy. How much do we need? What are clean sources to get them? Why are you consuming what you are consuming?

Ask questions, introspect, question your living, because if we don't question our existence, how else would we grow?



## 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.



— OUTER

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

*— Neil DeGrasse Tyson*



# THE BIG BIOHACKING BANG

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FINDING THE CRUX OF  
BIOHACKING AND THE NEED  
FOR BIOHACKING IN OUR  
MODERN WORLD



## Yield or Escape?

Finding ourselves here; the opening of 2022. Where do we place ourselves globally and individually?

Post (albeit optimistic with reference to “post”?) pandemic world?

Present condition of civilization’s diseases?

Yielding to one’s environment or escaping and finding blue zones beyond the contamination of our modern society?

We exist in a space that has very much become the hamster-run of “wash, rinse, repeat”, and most of us continue along the same vein, doing what we’ve always done. Until it’s too late.

## Our Current Health Crisis

The current health status quo may be dire, and despite (arguably) the greatest medical facilities in the world, the current American lifespan (according to the CDC) went down for two consecutive years even before Covid hit. The 20th century medical hammer used to successfully treat infectious communicable diseases successfully cannot be used to smash in the screw of 21st century’s chronic diseases.

## Knowledge is Power

Here is my plight: humankind’s lack of awareness.

Some may say we don’t have the ability to overcome the modern world we live in and that we are mere victims of our environments and of our genetic makeup. Others may never even consider these caveats. Humanity’s “survival of the fittest” seems to have landed in, “Let’s not rock the boat”. But, rocking the boat



is exactly what I'm provoked to do, and what I desire to provoke humanity to do. We neither need to overcome the world we live in, nor do we need to succumb to the health crisis our modern lives impose on us. We are actually able to live well and whole and thriving in the world and space we find ourselves in. We just don't know this because not many people are talking about it.

Yet.



## We are Creators

Enter biohacking, the art and science of optimizing personal health and wellness. We are not victims of our genetic makeup, nor are we victims of the spaces we live in. We are very much in control of how we thrive, and knowing this fact is the first step to taking ownership of our personal health and wellness journeys.

## So what is Biohacking?

In short, I like to refer to "biohacking" as personal health optimisation, or in expanded notation, the art and science of assessing and adapting your internal environment and your external environment and then making the necessary changes in order to optimize your mind, body and soul.

## How do We Implement Biohacking in Our Daily Lives?

Awareness. Do you know your personal health data? We currently have phenomenal apps and products that easily record and track your personal health data, from sleep to glucose levels, to amount of cortisol in your system. The beginning of my transformation started at

medical school 25 years ago. These first steps took me on a journey of becoming aware of how important our personal physiology is with regards to our physical and mental performance. I understood that my heart rate, weight, and subsequent performance were very much interlinked. This was the start of my health transformation, and biohacking would be my greatest, most important tool to change my health and then sustain the transformation.

## You're Not Alone

It is our absolute passion and purpose to bring humanity into a space of thriving. It is my desire to inspire billions. Connect with me and let's welcome you into The Made To Thrive community where we'll celebrate your health and performance victories with you, knowing you have the power to be the Creator of your own life's story. Biohacking is becoming the new buzz word for a reason. Find out why.

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## ABOUT STEVE STAVS

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Steve Stavs, South African pro biohacker, futurist and avid athlete, is known for his passion for excellence and constant curiosity in the field of health, wellness and holistic living. He is determined to impart his passion for thriving and longevity to others, and to inspire billions to become thriving human beings.

A marriage between science and philosophy, Steve embodies growth and evolution. With an honours degree in Science, and over 20 years of research in ancient wisdom, coupled with expertise in Chinese medicine and philosophy, he is the founder of Made To Thrive and the host of The Made To Thrive Show.

As the founder of Made To Thrive, Steve's vision is to infuse others with the power of awareness in self, harnessing control over wellness, aging and performance. As an accredited performance coach and professional biohacker, Steve draws on 25 years' experience as an entrepreneur and business owner, and has lectured to over 10 000 medical professionals. He has been featured in multiple main stream media outlets, while Steve's keynotes have attracted significant international exposure.

Website <http://www.madetothrive.co.za/>



# 7 BENEFITS OF **COLD** SHOWERS



**C**old showers are one of the easiest biohacks you can integrate into your day to day life. Here are the benefits of this practice.

The field of biohacking is massive and contains various practices for boosting your physical health and sharpening your mind. However, many of these biohacks require the use of specialized equipment or supplements.

Today we're looking at one of the easiest biohacks anyone can implement in their day-to-day life. It doesn't require any specialized equipment or purchases. We are of course referring to cold showers.

Believe it or not, the simple act of showering with the water temperature turned all the way down can offer numerous benefits for both your body as well as your your mind. Let's look at a closer look at these benefits and the scientific evidence backing them up.

## What Water Temperature Counts as a "Cold" Shower?

To reap the benefits of a cold shower, your water temperature should ideally be under 70°F. This is cool enough to stimulate various physical mechanisms in your body, and is a great way to kickstart your day.

## Benefits of Cold Showers

Cold showers can offer the following physical and mental health benefits:

### 1.Improving Your Mood

Taking a cold shower in the morning may help elevate your mood. Studies have found that exposure to cold temperatures activates the sympathetic nervous system and increases the concentration of endorphins and noradrenaline in the blood.

In addition to this, the shock from the cold water hitting your skin's temperature receptors sends a spike of electrical impulses from your nerve endings to your brain. All these mechanisms are believed to have an anti-depressant effect.



So if you suffer from depression or experience low-moods in the morning, a cold shower may offer a quick and natural solution for elevating your mood temporarily.

## **2.Speeding up Your Metabolism**

Showering at cool temperatures may help kick your metabolism into overdrive. This occurs because cold temperatures cause your body to shiver in an attempt to warm up. This shivering process uses energy, which may help you burn some extra calories.

A study found that metabolic rates doubled for mice that were exposed to cold environments. This metabolism increase was accompanied by increased food consumption with-

out the subjects gaining weight.

Cold showers may not necessarily help you lose weight, but they could be useful for increasing your calorie consumption without putting on extra pounds.

## **3.Nourishing Your Skin**

Another benefit of cold showers is improved blood circulation throughout your skin. This circulation is important for helping nutrients and oxygen reach different parts of your body. As a result, improved blood circulation enables skin cells to repair themselves faster and gives your skin a healthier natural appearance.

#### 4. Combating Skin Inflammation

Cold showers are also believed to reduce skin inflammation. If you suffer from skin problems that make your skin red, puffy, and itchy, a cold shower can decrease your skin temperature and cause your blood vessels to constrict. The net effect of this is reduced swelling and inflammation.

#### 5. Reducing Muscle Pain

Standing under cold water for several minutes can soothe achy muscles and reduce swelling. This is similar to the relief that ice compressions offer for muscle pain. However, cold showers may be safer than ice compressions, as the latter may cause ice burns when used improperly.

So try taking a cold shower the morning after a heavy workout. It'll help keep your muscle

aches at bay and invigorate your body to take on the day's challenges.

#### 6. Boosting Your Immune System

Can taking cold showers boost your immune system and lower your chances of falling ill? Some studies seem to suggest so.

The shock of a cold shower causes your body to release adrenaline, which may produce anti-inflammatory effects. This may help combat certain illnesses and diseases, and reduce your chances of falling sick.

One study even found that employees who took cold showers regularly were less likely to call-in sick at work.

#### 7. Increasing Energy Levels

As mentioned earlier, cold showers cause your body to release a small amount of adrenaline. This also has the net effect of increasing your energy levels. After all, adrenaline is usually released in situations where your body is on high-alert and requires bursts of energy.

Taking a cold shower allows you to safely boost your adrenaline and energy levels without exposing your body to actual danger. This makes it a great biohack that anyone can follow regularly.

#### How to Take a Cold Shower?

If the aforementioned cold shower benefits have convinced you to start taking them regularly, you may discover that they can be very uncomfortable at first. However, this is part of the reason why they are so effective. Cold showers are meant to shock your body and kick various mechanisms into overdrive.

If you want to take cold showers comfortably, you will need to ease yourself into them gradually. Start by taking a shower with water at room temperature and then turn the temperature down slightly near the end of your session.







Practice deep breathing under the water to help your body get used to the water's coolness. The next day you should try showering at a slightly cooler temperature. Turn the temperature down even further near the end of your shower while maintaining a calm state of mind. After a few days of following this trend, your mind and body should be able to withstand cooler water temperatures comfortably.

### Are Cold Showers Safe?

Cold showers are generally safe to take, assuming you are in good health. Some people with pre-existing heart conditions should avoid cold showers as the shock from cool water may cause heart attacks or a stroke.

It is also worth noting that cold showers may not be for everybody. Showering with cold water as soon as you wake up in the morning could make some people feel worse than before. So try taking cold showers for a few days to learn if they are the right biohack for you.

THE CYBORGMEDIA TEAM



# TECHNIQUES FOR OVERCOMING FEAR

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It is no secret that many people are afraid of public speaking. Their fear can be debilitating, making it difficult to speak up in meetings or even talk to friends and family.

Fear also has a way of turning into anxiety when you know you have something coming up that makes you uncomfortable. This post will help you learn a few techniques of overcoming fear that can improve your life and help you live more confidently.

Fear has plenty of effects like:

- It leads to denial.
- If severe, it can cause illnesses.
- It makes you miss important life events.

Knowing your triggers is the first step of overcoming fear. For example, if you get anxious in crowds or are afraid to fly, avoid these situations until they don't bother you anymore.

Know that nothing will happen when you're being brave and taking risks. Often it's your own thoughts making you scared. Tell yourself, "I'm going to do this," not "What if I fail?"





It doesn't matter how many people tell you that something is scary -if it appeals to your sense of adventure- go for it. It can be a great way to grow as a person and push outside what felt like comfortable boundaries before.

Worries and anxieties come up during difficult moments, making them seem more intense; this is natural. Remind yourself you are not alone, and it will get better.

It's normal to feel a little afraid when facing something new or challenging because of the uncertainty, but remember that there is nothing wrong with feeling scared.

On the contrary, it means you're excited about an opportunity for growth and self-improvement.

Write down your fears in one column on a piece of paper, then write a second list on the other side listing what could happen if you were brave enough to do them anyway (or think up some good things).

You'll be surprised how many times there won't be much at all in both columns.

List out solutions until they don't exist anymore, like taking deep breaths before going into crowds or getting feedback before giving a speech.

#### Here Are Some Other Strategies To Overcome Fear Alone or With the Help of a Therapist

Do something that worries you until it doesn't bother you anymore, like playing an instrument in front of people for the first time and then practicing; how long ago did this happen?

Focus on thoughts that support courage and strength, not fear. The more you tell yourself positive things about your abilities, traits, and choices-the easier they become.

This behavior is called cognitive Restructuring, where you change your negative thoughts into better ones by looking at all possibilities rather than just what's most likely. You can do cognitive Restructuring through journaling or creative writing.

### **Talk to a Therapist or Coach**

A mental health professional can help you identify and change the thoughts that make fear stronger, give you coping mechanisms for when your fears come up, and teach you how to enjoy life more.

### **How To Pick the Best Therapist for You**

Therapists work with people who have a wide range of problems, so it's essential to find someone that can help with your specific needs.

It would be best to have some questions answered before seeing the therapist for the first time: if they have a license in their field and what kind of insurance they accept.

Therapist training varies—some may have training specifically for trauma therapy or depression but not anxiety or substance abuse.

You'll need to ask your provider where they see themselves as experts and how long they have been working practicing this specialization.

Find someone who has gone through what you're afraid of too, and ask them how they overcame it. Sometimes hearing about other people's successes helps us see that we have potential as well.

For example, if giving presentations worries you, then find someone in your field who offers talks often and pick their brain on how they dealt with their anxiety at first.

It may seem silly but sometimes listening to others' stories makes your anxieties seem less intense by comparison because many things are surmountable with a bit of courage.

Find something that makes you feel strong and brave when times are hard—like your favorite song or anything from which we derive pleasure. For example, if you love to run, go for a jog when you're feeling stressed.

### **Find an Emergency Plan**

Figure out what to do if the thing that makes us scared is happening, and there's no way we can get away from it. For example, if you are afraid of flying but need to fly to see your family on vacation—then take deep breaths before boarding or imagine yourself being brave while sitting next to somebody who looks like they have everything under control.





Knowledge about how our brain works helps us be able to understand how scary situations happen and then figure out ways around them. When something new enters the mind, it takes over because we only remember details that were most intense as humans. Doing this causes other memories (both good and bad) to become blurry.

You're also more susceptible to fear when your brain is tired because the reasoning part of our brain (the prefrontal cortex) can't work as well, which means we don't think about consequences or know how to handle a harmful situation if it happens.

### **Think Like a Cyborg**

Try to detach from your emotions by thinking about it as though you were a cyborg—you're not the problem; there's just something in your system that needs fixing.

For example, if you have social anxiety, think of yourself contacting people. Still, they don't know who you are and never will because after this meeting (or conversation) is over, nothing else will happen - and remember that "this" moment won't ever come back.

What is neuroscience calisthenics? Neuroscience calisthenics is the practice of acting as if you are a cyborg and taking control over your thoughts to overcome fear.

### **Understand Brain-Body Connection**

Connecting your brain and body helps encourage the right messages to reach the appropriate places. For example, if you feel sad, exercise because it releases serotonin, a neurotransmitter that makes you happy.

### **Short-Term and Long-Term Effects of Fear**

Fear is part of the brain's natural fight or flight response that keeps humans safe from harm. The short-term effects are increased heart rate, sweating, and dilated pupils—all things that help prepare us for a physical attack.

However, longer-term side effects can increase anxiety levels (even in otherwise healthy individuals) as well as posttraumatic stress disorder in those who have experienced trauma.



### ***How To Prevent Fear in the Future?***

Know when to take a break from what you're doing and get some fresh air: When you don't take the time to recharge, your mind starts playing tricks on us. For example, if you've been up for more than 24 hours, then it's perfectly natural that your thoughts might start getting weird or scary.

Get enough sleep at night so that you can function throughout the day without feeling like things are spiraling out of control (if this is an issue).

Take deep breaths before going into something new, and imagine how good it'll feel after; this will help teach the brain to associate positive feelings with whatever scares them to prevent future fear reactions.

### ***Think About Why People Get Scared***

Often we find ourselves scared for a reason, and it's important to unpack that. For example, suppose someone is afraid of heights. In that case, they might have learned this fear from an experience where they were near the edge of something and almost fell or saw someone else fall—anytime you discover what “scary” means in your life, you are more likely to be triggered by similar situations.

### ***Fear Can Also Happen Because You Feel Bad About Yourself***

When people feel bad about themselves (such as due to social norms) and don't know how to fix it, their brain will come up with solutions on its own which may seem like a good idea, but unfortunately, one way out is often through self-harm such as cutting or binge eating.

### ***Benefits of Overcoming Your Fear***

Fear is a common emotion, but it can't be healthy for the brain to live in fear all of the time. Awareness and understanding that there are ways to combat this empower you.

By overcoming your fears, you're able to realize what's most important in life and spend more time living instead of feeling trapped by worry.

Be honest with yourself. If you know that there is a reason for your fears, it's crucial to work through those issues.



If you're feeling overwhelmed by fear, take some time to clean up the environment. Get rid of things that cause anxiety, such as pictures or objects that remind you of what scares you, and make sure not to watch scary movies before bedtime.

Use an app like Calm (available on both Apple and Android), which provides soothing sounds and images to help alleviate panic attacks when they happen.

When something triggers fear, ask yourself why are these thoughts coming into your head? Understanding that you are in control of your thoughts is the first step to taking back power.

### ***Difference Between Fear and Anxiety?***

Fear is a response to something that has yet to happen, while anxiety is a feeling of worry or unease about what could happen in the future (whether it is fear-related or not). Anxiety can cause panic attacks, but they are less likely.

If you find yourself experiencing frequent and intense feelings of dread, try seeking out professional help because this may indicate an

underlying mental health condition such as Posttraumatic Stress Disorder.

### ***How Do You Recognize a Panic Attack?***

- A racing heart.
- Shortness of breath or chest pain.
- Feeling like you're choking.
- Tingling in the hands, arms, feet, legs, and face (paresthesia) Numbness in a part of your body.

It's important to know what panic attacks are so that if you start experiencing them, it would be easier to work on prevention. But many people don't have any idea they are having one until after it already starts; this is why recognizing the signs and symptoms as soon as possible makes them much more manageable.

Panic attacks can even happen while sleeping, which indicates that this might not just be anxiety anymore—if these often occur, seeking out professional help is a good idea.

### ***Can Overthinking Cause Fear?***

It's possible to overthink something and then have a fear of it happening. So if you find your-

self running through scenarios in your head, try thinking about them differently—even; if the situation were to happen, you could do some things, so don't feel like giving up just yet.

Fears become less scary when you realize that they're not authentic or false but rather possibilities. Of course, fearful thoughts will always exist, but by learning this truth and changing how you perceive your fears, you'll be able to overcome any anxiety attack because we know what's going on inside our brains.

### **How To Stop Overthinking?**

- Change your thoughts to something that feels better.
- Keep a list of all the things you're grateful for in life and rethink what is essential.
- Take care of yourself—you deserve it.

### **How To Handle Panic Attacks?**

Use a technique called "Stop, Drop and Breathe," which involves identifying when you're starting to feel the panic attack coming on and then slowing down your breathing; this will make it easier for people with anxiety because they'll be less likely to hyperventilate.

If these thoughts are persistent or happening frequently (or if any other symptoms are present), speak with a professional immediately.

### **Does Reading Help?**

It's always a good idea to take time for self-care, and reading is one way of doing that. Reading can help soothe your mind while also providing knowledge in whatever genre you're into.

### **What Books Should You Read?**

- The Anxiety and Phobia Workbook by Edmund J. Bourne
- When Bad Things Happen to Good People by Harold S. Kushner
- Feeling the Fear and Doing It Anyway by Susan Jeffers

### **Conclusion**

As long as you're willing to take the time and put in the effort, you can conquer your fear. Be honest with yourself about what's going on and start taking small steps towards change one day at a time. Overcoming anything feels good, and it begins with deciding that this is something worth fighting for.

## THE CYBORG MEDIA TEAM







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

**INNER**

# SECRETS ON EEG WAVES

**CAN EEG HEADSETS SUPERCHARGE  
YOUR BRAIN?**





## Is it Possible to Use EEG Devices to Improve Performance During Workouts?

**E**EG devices can read and adjust the brainwaves to manage one's mood, energy levels, and performance, just like stimulants in coffee.

Using technology to control the human brain may sound too good to be true but it isn't. We now have access to technology that is blurring the line between sci-fi and reality. An EEG headset does exactly what it sets out to do: 'hacking' the brain's waves to help you focus on the task at hand. In this case, workout.

Using EEG headsets may well be the difference between squeezing out that extra rep and going all-out than giving up mid-rep because you feel you're exhausted. Think of it this way, if a rich friend were to reward you with \$1000 for each extra rep you do after you're 'tired' during workout, and you're able to muster up a couple of extra reps, you didn't go all out.

The human mind subconsciously decides to hold back when the workout routine gets too boring or too tiring. This affects your progress and your gains. And you won't always have a rich friend 'bribing' you to hit that extra rep or two.

This is where EEG headsets fit in. We all face concentration and focus problems because of endless distractions pulling us in every which

direction. These novel devices let you 'tame' your thoughts and feelings at once by channeling them into a single task (usually your workout routine) so you can perform it efficiently and without any distractions. They let you narrow your focus levels and go big.

EEG headsets have made generational leaps when it comes to progress, going from niche gimmicks for hardcore biohackers to highly efficient meditation devices that now cater to a rapidly-growing market.

Note: EEG headsets let you alter your state of mind that to one that is favorable to a workout routine. You cannot and should not wear EEG headsets during a workout routine because movement will interfere with electrical signals. Use the headset to train your mind into a heightened state of focus and concentration to achieve your workout goals for the day.

## Tapping into Brain Waves

The concept behind EEG headset sounds like it was pulled straight out of a sci-fi world, which it is, but it has got hard sciencebacking it all the way. EEG, short for electroencepha-



lography, is a technique that lets you record and measure brain waves. It has traditionally been used to diagnose strokes, epilepsies, and even brain death.

But manufacturers got the bright idea of tweaking EEG devices to help with everyday tasks and performance.

### **There are five types of brain waves:**

- Delta waves, usually associated with deep sleep.
- Theta waves, observed with sleep, deep meditation, drowsiness, and occasionally, creative states and relaxation.
- Alpha waves, observed with light meditative states and relaxation. They are used to trigger a state of productivity and focus. They are produced more often when the eyes are closed.
- Beta waves, observed when the person is moving around and anxious.
- Gamma waves, rarely seen but they play an important role in higher learning.

Biofeedback diagnostics lets you track all 5 brain wave types and gives you insights into your focus and concentration levels. Furthermore, EEG devices use sensors to measure your brain waves and then stimulate your energy levels to manage your mood with your thoughts alone. By comparison, you would need a considerable amount of stimulants in the form of coffee and tea to reach the same levels of improvement in concentration.

It is worth noting that brain waves are still not fully understood and generally only deal with delta, theta, alpha, and beta waves. Gamma waves are poorly understood and aren't associated with any particular mood.

EEG headsets work by harnessing measurements captured from the brain. This data is then used by the accompanying app to play certain games, an exercise that will flood the prefrontal cortex with oxygen and blood. This can reportedly provide the brain all the motivation it needs to carry out the task at hand, it could be a workout routine, completing an assignment, work-related job, or something as simple as going to sleep.





## There are several ways in which EEG headsets can prove to be useful for neurofeedback:

- Helping you with stress to relax, altering the brain waves from beta to an alpha state
- Helping you fight feelings of lethargy, primarily due to an alpha or theta state
- Helping you relax and fall asleep on command, by dropping down to the lower theta state

By learning how to control the EEG device, you can train your brain to do exactly what you want.

## Personalized For the Individual Wearer

As with most things in life, you get what you pay for. Many of the higher-end devices are particularly advanced and offer incredibly sensitivity with lots of sensors. The tradeoff is that it takes longer to dig the sensors into your scalp to get accurate brainwave readings and analyzing the data.

The big marketing names right now are NeuroSky, Muse, and Thync, and Neuroelectrics, each offering their own sets of features. Lower-end devices will unsurprisingly, have the lowest number of electrodes to use. This will affect the accuracy and performance. Most devices offer a fairly limited number of channels, with some only offering 6 to 10 and others offering over 64 channels.

## Diving into the Disadvantages

The technology for EEG devices is pretty impressive and lets train your mind so you can perform better at the gym, but there are a few technical challenges that they need to overcome.

EEG headsets don't provide the same level of coverage as professional EEG systems. They are designed, for ease of use, and to be put on much faster. Furthermore, the electrodes in EEG headsets are not placed by hand, and instead, are placed in a predetermined position set by the manufacturer. That being said, the electrodes are somewhat adjustable and flexible to accommodate different head shapes and sizes.



Another big limitation is that EEG headsets are easily subject to 'noise' from outside electrical signals. While commercially available EEG devices have plenty of shielding to minimize electrical interference, most typical EEG headsets don't have nearly the same level of shielding.

### Wrapping Up

EEG headsets are novel devices that have all the science and research they need to 'train' and manage the human brain. The cheaper models tend to be a little lackluster with just a few electrodes which means you won't get the same level of performance. But the more expensive models, which are aimed at the hardcore user, will let you supercharge your brain and improve athletic performance.

As out-of-the-world as it sounds, EEG devices may well be worth your investment.

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## THE CYBORGMEDIA TEAM





**LUCID VISIONS:  
THE FORGOTTEN  
FOURTH STATE OF  
CONSCIOUSNESS – PART 1**

## SIMPLE SUMMARY:

**W**e humans have a natural dynamic capacity for psychological and physical resolution and self-healing. These self-organizing processes are also the functional foundation of many techniques and therapies.

We have four fundamental states of consciousness that all play a crucial role in healing and adaptation. We are commonly aware of three of the four – waking, dreaming and sleeping however we have essentially forgotten the fourth. Many of your psycho-emotional challenges will naturally resolve and techniques and therapies will finally succeed if you have sufficient conscious experiences of Lucid Visions, the Forgotten Fourth State of Consciousness. The neuroVIZR Brain Engagement Experiences support and retrain you by generating the Fourth State of Consciousness and its Lucid Visions.

The key position in this paper is that because of modern lifestyles, we commonly lack the Lucid Visions/Fourth State of Consciousness and consequently have an inadequate natural response in trauma resolution. We suffer from a **“Fourth State Deficiency Syndrome”**.

## INITIAL REFLECTIONS:

Up until our modern era of electricity and night time artificial lighting, we humans spent a great portion of everyday in Darkness – and our only light came from the Flickering Flames of Fire, the original “Mind Machine”.

## PREFACE:

“In order to acquire continuity of consciousness, unaffected by lapses into unconscious states, you must hold yourself at the junction of all the

states, which constitutes the links between sleeping, dreaming, and waking: the half-sleep or Fourth State”.

-10th century Tantric text (over 1,000 years ago)

## DEFINITION:

In this paper, you will encounter the word “lucid” which is derived from the Latin verb “lucere” – “to shine”. The term here for us has two





basic and interrelated meanings:

- 1)“clear perception”;
- 2)“filled with light”.

And so, Lucid Visions are experiences that are principally visual (although not exclusively as they are also often suffused with intuitive meaning) and express themselves with a clear and very real perceptual quality. Without attention and practice, Fourth State experiences may not be “lucid” and are often fleeting and drowsy events at best.

Readers may quickly be reminded of the concept of “Lucid Dreams” which are, in fact, directly related to The Fourth State of Lucid Visions. Certainly, most Sleeping Dreams are not lucid. More about that later below.

### INTRODUCTION:

In our contemporary urban cultures, we suffer from a lingering malaise based on a fundamental “psychophysical nutritional” deficiency. This deficiency drives our unsatisfied appetites into a range of addictive pursuits and dangerous behaviors. Our psyche remains confused and constantly seeks remedies yet, in the end, the lack leaves us craving and unsettled.

The thief may well be modern electricity. It has robbed us of the daily sanctuary of Dark-

ness that hosted millennia of our conscious evolution. It has robbed us also our very first guide into transcendental experience...the Flickering Flames of Fire. Without the Darkness and without Flickering Fire, we have been deprived of a crucial psychophysical nutrient. We have been deprived of Lucid Visions – the Forgotten Fourth State of Consciousness.

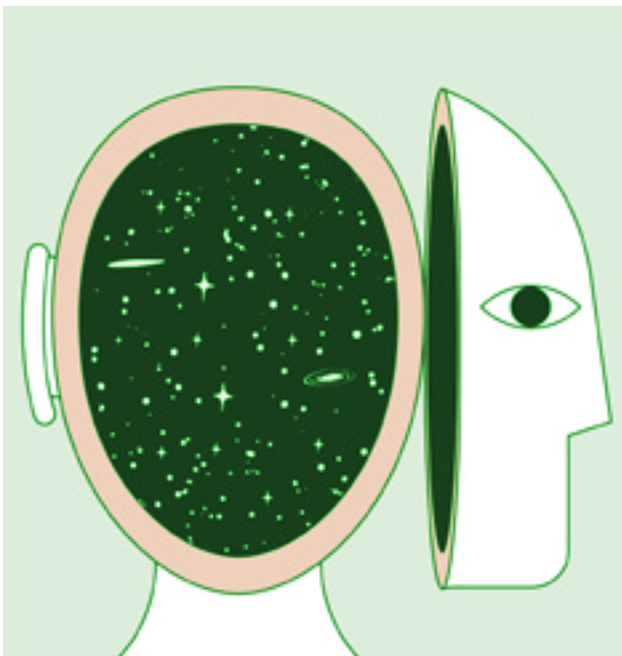
Deprived of the fertile creativity generated by Lucid Visions, our appetite is instead stuffed with the psychological “junk food” of television and digital social media. And we pay a life-long price.

### THE FOUR STATES OF CONSCIOUSNESS:

Life has unavoidable challenges some of which leave us hurt and perhaps damaged. Living with unresolved psychophysical wounds limits and complicates even the simplest experiences of wellbeing. Life wants to live itself full so it is understandable that evolution would do its best to develop innate processes for mental/emotional self-healing.

Today we recognize the three common states of consciousness as waking, dreaming and sleep. Throughout history, major minds such as Aristotle, Kant, Freud, and Jung have pointed to the dynamics of these three states as being intrinsic in psycho-emotional trauma resolution and fundamental wellbeing. It is apparent that these three states (waking, dreaming, sleeping) require fluid relationships while also maintaining distinctive domains of influence. Overlapping experiences or obstructive restrictions lay the foundations for not only diminished wellbeing but, even worse, pathological compromises.

Dreams act to harmonize and consolidate the memories generated by regular waking experiences. Meaning and self-identity are explored via the fantasies of night time reverie and high emotional charges can be defused and desensitized. With consolidation, deep sleep acts to refresh and renew the bodily demands of regular activities. Night-time psycho-emotional consolidation and the integration of physical body-based memories is truly at the core of conflict and trauma resolution. And so,





it becomes obvious that disruptions in the regular transfer of waking, dreaming and sleep rhythms will be potent impediments to the natural self-healing processes that we have earned throughout our long human evolution.

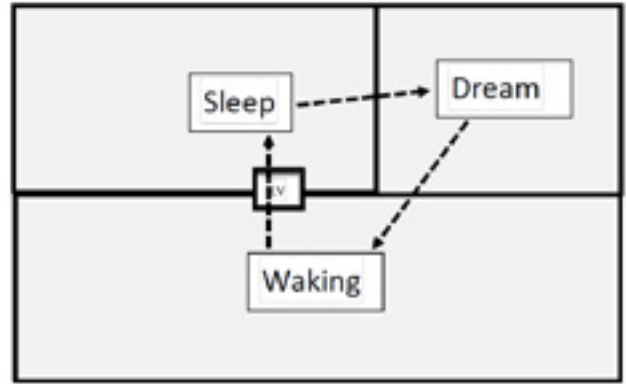
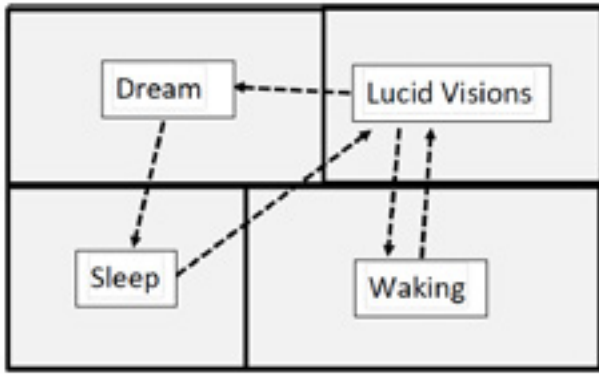
There is a Fourth State of Consciousness that acts to harmonize the triad of waking, dreaming and sleeping states. Disrupted modern lifestyles divorced from natural circadian rhythms of Darkness and the absence of Flickering Fire have made the Fourth State an empty chair at our mental table. The drowsy slip and slide of hypnagogic/hypnopompic access is insufficient in allowing us Fourth State satisfaction and most people are almost entirely unaware of that regular gateway in any case. Considering that our culture's materialistic philosophy praises reason and logic while mistrusting and demonizing "altered states of consciousness", the Fourth State of Consciousness is rarely considered of natural importance – and we ignorantly suffer its absence. Techniques and therapies are limited and even mysteriously crippled as they attempt to roll the boulder up the side of our psychic mountain against some unseen gravity of resistance. The self-regulatory capacity of the psyche continuously exerts its influences towards resolution yet the innate formulas lack one key ingredient – the fertile creative insights and perspectives of the Lucid Visions of the Fourth State of Consciousness.

### OUR FOUR ROOM HOUSE OF CONSCIOUSNESS:

Consider the analogy of our consciousness being a house with four rooms:

- 1) Waking;
- 2) Dreaming (sleeping dreams);
- 3) Sleep;
- 4) Lucid Visions (waking dreams).

What would be the size of each room? And how do you move around in the house? And how much time do you spend in each room? Is Lucid Visions even a room any more or has it just diminished down to being a short hallway between Waking and Sleep?



### THE WAY WE NATURALLY RESOLVE TRAUMA:

All four states of consciousness must harmonize so that our innate self-healing processes can desensitize and diffuse the imprints of trauma and incomplete experiences. In the same ways that our physical bodies resolve imponderable numbers of metabolic and immunological challenges in every moment of our lives, so too our psycho-emotional-physical experiences are being absorbed into the resolution dynamics of the Complex Adaptive System we call our Mind and added to our learning and wisdom. The novel idea of a “self-cause” governed principle has emerged in several disciplines and is referred to by numerous synonyms, such as spontaneous, endogenous, autogenous, self-organized, self-generated, self-assembled, and emergent. This “complex” and “adaptive” property is currently applied to our brain and our manifest mind.

The most effective approaches to supporting the natural resolution of challenging experiences are achieved indirectly by enhancing the self-regulatory capacities found in the dynamic interactions between the four states of consciousness. The unimpeded resolution capacities of the mind/body have unmatched biological precision and wisdom. When the self-regulatory capacities are obstructed by relationship disruptions, targeted or assertive attempts to bring resolution can not only fail but even aggravate the complaints.

We can broadly divide our conscious experiences into two domains: 1) when we are in an active “task mode” and bent on achieving some purposeful action and 2) when we are in passive “non-task mode”. The “task mode” has a range of characteristics from high “flow states” through to certain stages of exerted effort. The “non-task mode” also has a broad range of characteristics that include every-





thing from simple waking rest to hypnagogic reverie to dreaming to deep sleep. Various meditation techniques can be found in both “task mode” states and “non-task mode” states.

In the waking state, the external demands and constraints of “task modes” absorb much of the attention and resources inherent in metabolism. The internal self-regulatory and self-healing functions are at their best levels of efficiency in the “non-task modes”. The “self-organizing” nature of a Complex Adaptive System manages the transitional processes required in shifts both between “task modes” and “non-task modes” as well as within each of these modes. When the Fourth State of Consciousness (Lucid Visions) is weakened, and especially when absent, the critical shifting dynamics in phase transitions are disrupted and become dysfunctional. In most cases, the primary disruption occurs in the transition between the waking state and the dreaming state. Secondary disruptions will also occur between the dreaming and deep sleep states.

Of the many consequences of disrupted transitional phase shifts in the four modes of consciousness, natural psycho-emotional trauma resolution stands out predominantly. Furthermore, the intricate web of psycho-physiological responses triggered by a variety of therapeutic measures can easily under-function and become resistant.

### SHIFTING FROM OUTSIDE CONSCIOUSNESS TO INSIDE CONSCIOUSNESS:

“Exteroception” is the term for when conscious attention is directed outwardly into the world. “Interoception” is the opposite for when we direct our attention into the more visceral realm of inwardly directed sensations. It is also known by the new term, Neuro Reality. By and large, “task modes” involve “exteroception” while “non-task modes” involve “interoception” or Neuro Reality.

Psycho-emotional states are experienced viscerally and involve “interoception”. This “inward” attention and perception are necessary to maximize our natural self-regulatory processes. The positive integration of challenging experiences draws together the self-healing mind and autonomic nervous system. This happens more efficiently when “task

mode” “exteroception” has transitioned into the embodiment of “non-task mode” “interoception”.

At the most basic level, this means we need to “rest” to enable the natural integration processes...and a crucial aspect of the dynamics of rest involves the intermediate state between waking and dream/sleep, the Forgotten Fourth State of Consciousness and Lucid Visions.

The issue of “rest” brings us to the pivotal point in the process of accessing the Fourth State of Consciousness. In order to access then acquire the “lucidity” of the Fourth State, (and not just



the transitory murky drowsy veil), one must develop the ability to experience Deep Conscious Relaxation (DeepCoRe). DeepCoRe is the absolute gateway to the Lucid Visions of the Fourth State. Recall that in this context, “lucid” means “clear perception” and “filled with light”.

Because we are not habituated in pausing pleasantly in the “in between” interoception of the Fourth State of Consciousness, our experiences of Lucid Visions tend to slip right past us and we find conscious “rest” quickly transformed into unconscious sleep – that potent deep dive that is so common in the famous “afternoon nap”. The dive is especially potent if we decide to “rest” in a darkened room. It is typical to awaken later totally disoriented and unaware as to the time of day or night and even sometimes as to where we are. We have lost the ability to sustain the experience of deep conscious relaxation (DeepCoRe) which is the realm of the Forgotten Fourth State of Consciousness, the realm of rich, luxurious Lucid Visions and insights.

### **ABOUT HYPNAGOGIA & HYPNOPOMPIA AS LUCID VISIONS:**

Typically, these days, hypnagogia and hypnopompia are strictly defined as elusive transitional states between waking and sleep and sleeping and waking. Hypnagogia, from the Greek, means “leading to sleep” and hypnopompia means “sending away from sleep”. They are commonly considered “semiconscious states” for the average unskilled person.

This definition is true but only in a very limited sense because these two states are actually a very important aspect of waking consciousness that have unfortunately been lost and forgotten in our modern lifestyles. Because of this misunderstanding, it is far better to rename this The Fourth State of Consciousness and release it from its sleep related restrictions.

Conventionally, “hypnagogia” is defined as the transitional state of consciousness between wakefulness and sleep. It’s the opposite of “hypnopompia”, which is the transitional state that occurs before you wake up. During “hypnagogia”, it’s common to experience in-

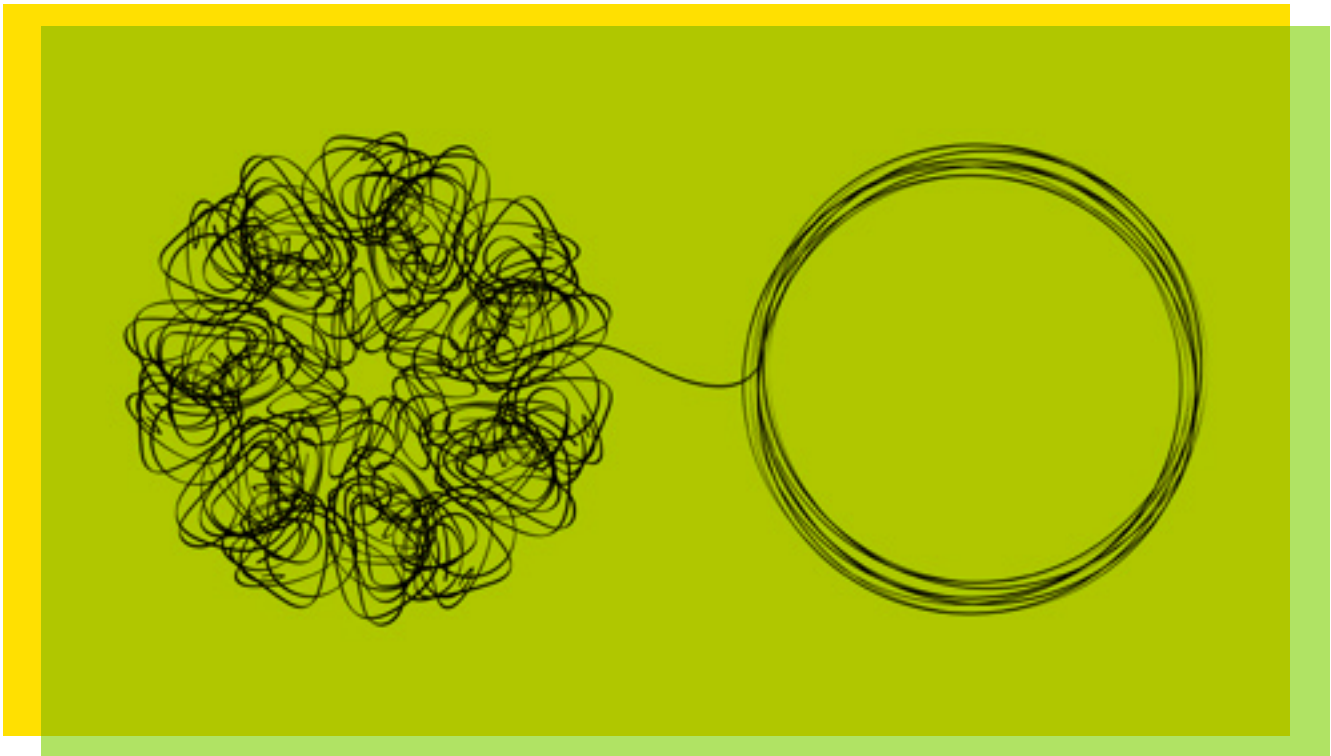
voluntary and imagined experiences of colors, patterns, faces and places that often carry a curious deep sense of meaning and intuitive understandings. These are referred to as hypnagogic hallucinations.

When learning about the Forgotten Fourth State of Consciousness, it is critical to appreciate that “hypnagogic/hypnopompic” experiences are NOT necessarily connected with drowsiness or sleep. All of the multi-modal brain related activities and the interoceptive sensations can occur with fully alerted qualities of consciousness – as they have reliably for pre-electric lighted darkness humans for many, many millennia. The neurological trick in this case is that with photic driving stimulation, the “dorsolateral pre-frontal cortex” stays active and ensures alertness while guarding against drowsiness. In contrast to the REM-sleep state, the dorsolateral prefrontal cortex remains activated during the flicker-induced waking dream and its functions of reflective thought and insight are preserved. Fourth State is combined with an open and receptive quality of attention, the conscious experience shifts from sitting between waking and sleep to between waking and dreaming – which (im-

portantly) injects into the dreaming state new qualities of insight and understandings – and kick-starts trauma and memory consolidation and self-organized resolution processes.

It is known that indigenous cultures (and expectedly, also past cultures) cultivate the Lucid Visions of the Forgotten Fourth State by resting with eyes open in a darkened room/cave and allowing the emergent imagery to project onto a mental screen in the darkened space. Here and now, lacking the confidence, time and patience for these traditional practices, we are able to conjure eyes-closed Lucid Visions using current convenient wearable LED technologies. Specifically crafted photic stimulation induces a state of consciousness which shares virtually all the attributes of the Lucid Visions/hypnagogic state except for drowsiness.

Interestingly, persons experiencing photic-induced Lucid Visions frequently experience an almost irresistible urge to sleep and will sometimes slip unconsciously into a deep slumber as a result of the induced state. Without the skill of moving into deep conscious relaxation (DeepCoRe), the habituation of transitioning directly from wakefulness into sleep stays in command. With repeated Lucid Vision induc-



tions, the person becomes increasingly able to maintain alertness and reap the mounting benefits of the Lucid Visions Forgotten Fourth State of Consciousness.

## WHAT ARE THE QUALITIES & CHARACTERISTICS OF THE FORGOTTEN FOURTH STATE?

As explained above, what is here known as the Fourth State is more commonly known as hypnagogia (transition of waking to sleep) and hypnopompia (transition of sleep to waking). This perspective does a major disservice by mistakenly reducing this critical Forgotten Fourth State of Consciousness down to a couple of unimportant and unrecognized odd experiences that most people don't even recognize.

The bold and obvious fact is that the Lucid Visions Fourth State is a natural feature of our consciousness and is biologically built into our daily circadian cycle. It is as natural as the regular experiences of waking, dreaming and sleeping. Many of the innate quali-

ties of the Fourth State express themselves in familiar ways – we just don't give them their proper due. These following experiences are examples and are all rooted in the Lucid Visions state and manifest expressions along a spectrum:

- 1) Creative insights;
- 2) Novel perspectives;
- 3) Artistic expressions;
- 4) Scientific discoveries;
- 5) Intuitions and foresight;
- 6) Knowing without thinking;
- 7) Problem solving;
- 8) Glorious colors;
- 9) Complex visions;
- 10) Ironic & humorous understandings;
- 11) Remote viewing;
- 12) Prophecy;
- 13) Mental time & space travel;
- 14) Memory retrieval;
- 15) Conflict resolution

*Stay tuned for Part 2 of this Article in the next upcoming Issue!*

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### ABOUT GARNET DUPUIS

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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.

Webiste: <https://neurovizr.com/>



# 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*





# DR. ALAN BAUMAN

EXCLUSIVE INTERVIEW

**Leading Board Certified Hair Restoration, Physician & Founder of Bauman Medical**



*\*Listen to this conversation on our podcast by scanning this QR code or clicking [here](#)*

**D**r. Alan Bauman is a full-time board-certified hair restoration physician who has treated over 33,000 patients, has performed over 10,000 hair transplant procedures and over 10,000 PRP's since starting his medical hair loss practice, Bauman Medical, a 12,000 square foot, state-of-the-art "Hair Hospital" in downtown Boca Raton, FL.

Dr. Bauman is one of approximately only 200 physicians worldwide to achieve the certification from the esteemed American Board of Hair Restoration Surgery (ABHRS). Dr. Bauman is known for pioneering numerous technologies in the field of hair restoration including minimally-invasive FUE Follicular Unit Extraction, VIP|FUE™ No-Shave Hair Transplant, Low-Level Laser Therapy, PRP Platelet Rich Plasma, PDO-gro™, Eyelash Transplants and others.



You may have seen him on NBC Today, CBS Early Show, ABC Good Morning America, CNN, The Doctors, Spencer Kobren's The Bald Truth, Bulletproof Radio with Dave Asprey or featured in Men's Health, GQ, Vogue, Harper's Bazaar, The New York Times, Oprah Magazine and many more. Dr. Bauman was voted "#1 Top Hair Restoration Surgeon" in North America by Aesthetic Everything for the 6th consecutive year, "Top Hair Restoration Surgeon of the Decade", and received the 2022 "Lifetime Achievement Award in Hair Restoration". He was also recognized by Forbes as one of "10 CEOs Transforming Healthcare in America."

*Could you please tell us a little bit about you and your accolades and how you got where you are today?*

Yes, I'm a full-time board-certified hair restoration physician. There's only about 200 of us in the world that have been certified by the American Board of Hair Restoration Surgery. I have also been accepted by the International Alliance of Hair Restoration Surgeons, which is a consumer organization that chooses physicians, and I'm also one of the elite Fellows of the International Society of Hair Restoration Surgery. So that's like a small echelon of the larger group of hair surgeons out there in the world. Here in the United States, I've been selected and voted as the #1 Hair Restoration Physician for six years in a row now. And they also awarded me Hair Restoration Surgeon of the Decade. And I'm proud to be listed as one of the best hair transplant surgeons in the world by Ape-to-Gentlemen - I think there's only about two dozen folks who are in that group.

I'm certainly excited to be amongst those top professionals and surgeons worldwide in and around not only the United States, but also around the world. So, it's been pretty exciting. I have a 12,000 square foot hair hospital - some people call it - although it's not a super sterile clinic type of atmosphere. It's a very warm and professional atmosphere here in Boca Raton, Florida, in the downtown area where we see approximately 1500 patients per year that come through the door. Some of those folks are going to visit us virtually, and the others are going to visit us in person. I've personally treated over 33,000 patients and performed over 10,000 hair transplant procedures and also over 10,000 Regenerative Medicine procedures, which includes PRP, cell therapy, and things like that.

I'm most well-known for FUE (Follicular Unit Extraction), the minimally invasive style of hair transplant that I helped pioneer back in the early 2000's. I developed the first instrument for that, a manual tool. Today, It's all mechanical and sometimes robotic. But a large portion of our patients that visit us here at Bauman Medical may never, ever, need a hair transplant. And that's super exciting for me because we're really trying to gear up to treat the hair loss process early on and protect and enhance the hair that people have so that they don't need as much of a hair transplant, or procedures. So, we're trying to maintain their own living and growing hair. And of course, hair is one of those things that makes people look good, but also feel great. And that's one of the exciting and fun parts of being in the industry.



*What drove you to get into this industry? What's your motivation and how do you use that original motivation to keep you going towards the future?*

When I entered into medical school and even thought about going into the field of medicine, I really didn't know anything about hair transplant surgery at all. I had been mentored at an early age by a prominent plastic surgeon in New York city. And he kind of guided me through the early stages of my medical career and also my surgical career, but it wasn't until I met a hair transplant patient when I really started to consider hair transplantation as really a viable option. I never had considered it at all. I thought hair transplants were 'pluggy' and painful and asked myself why would anybody go through that? But I was surprised to learn from that patient that he had had a hair transplant, number one, but it did not *look* like a hair transplant.

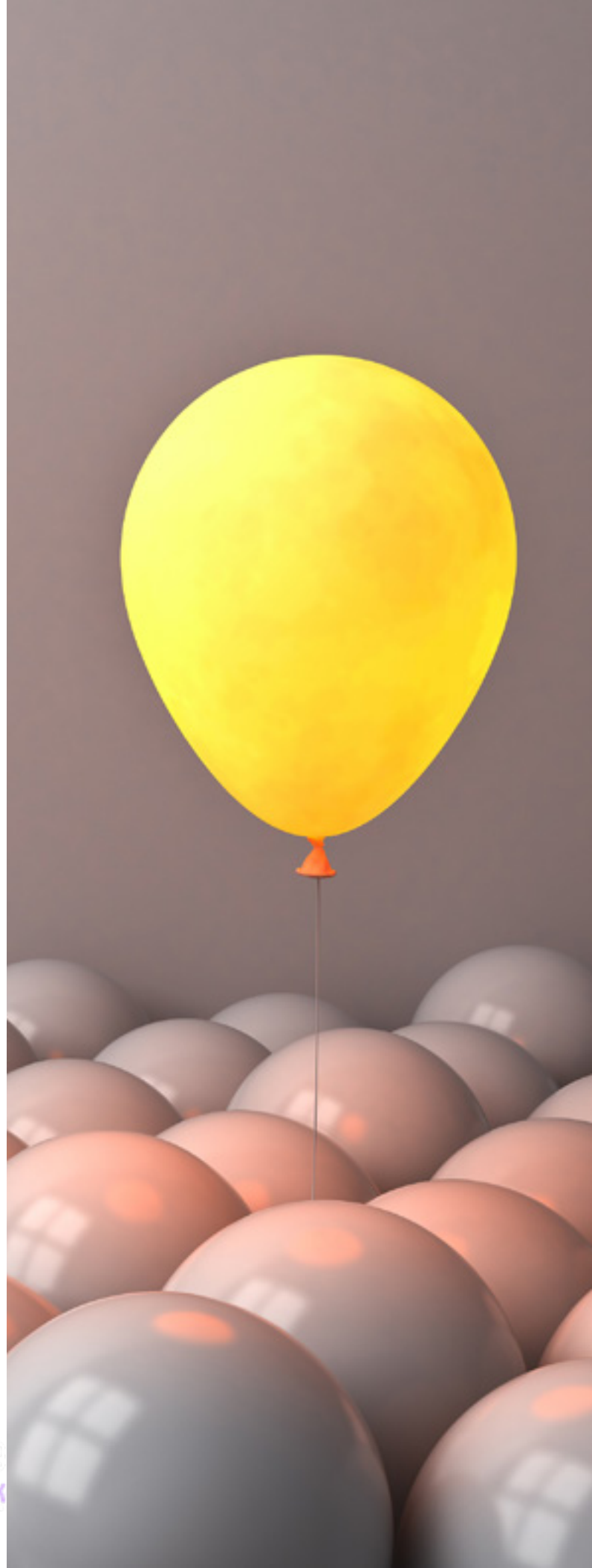
And we got into a pretty deep conversation about why he went to this specific physician to get this special type of procedure done, which included single follicle implantation. Keep in mind that this is in the 1990's, early on in my career. I didn't really have any experience seeing hair transplantation in the hospital as a surgical resident. Going through my internship and residency, it was mostly trauma and plastic surgery that I was mostly involved with. And so when I saw his results and heard him talk about the procedure itself, I thought maybe there's something to this. It sounds like the technology's changing. And then the other part of that conversation that always stuck with me is how the hair res-



toration procedure truly changed his life, both socially and professionally. He described how his relationships with others, professionally and socially, completely changed and did a 180 once he got his hair restored and how it changed his self-confidence, how he achieved a new job position and new success on the business side and entered into different relationships.

He said that he had finally found the love of his life through social connections and just felt confident and better about himself. So that was the beginning of my journey. As I started to look into hair restoration and hair transplantation in particular, I began learning more about how we could create something that looks normal and natural and truly change people's lives in that way. So, I always remember that first patient that I met all the way through, almost 30 years ago now. After learning more about hair restoration and transplantation, I had the opportunity to team up with a physician. I did a fellowship in Long Island and ever since then, I never really looked back. I went full tilt into hair transplant surgery and decided to open up my own practice. I moved to Florida with my wife (we were engaged at the time) and I built the business from ground zero here in downtown Boca Raton, starting with really just one patient at a time, always with the intention to change folks' lives for the better and to really make a difference, in their lives socially and professionally through hair restoration.

*Talk to me a little bit about your clientele and your methodology for how you would go about treating the average patient.*



Yeah. So certainly, we see all walks of life come through here at the hair loss practice. So, in the years past, patients may think it's only men that need hair restoration, but actually 50% of my patients are women today. I see patients of all ages, some even children who have been injured in accidents and burns and things like that, or birth defects as well as folks who have had hair transplants done in the dark ages, if you will, who need touch ups and things like that. So, I really see a huge variety of ages and both genders obviously. The technology has changed a lot in the early days of the practice. We didn't have a huge toolbox of treatments to try to protect or enhance someone's own living and growing hair, all that well in the early days. We had Minoxidil, which is a topical medication, FDA approved, obviously.

And then in the late 1990s, we had Finasteride, that was the old Propecia that became FDA approved. So we also of course

had other treatments, other modalities that became available and we started to implement them. I'm happy to say that I'm a pioneer of not just low-level laser light therapy, but also treatments such as PRP. Many of my patients were featured in some of the first presentations ever given to the International Society of Hair Restoration Surgery on the topic. We've done regenerative treatments for well over 15 years and over 10,000 treatments performed successfully. And I think one of the things that we really try to diagnose is the hair loss process early on and measure and monitor exactly what the patient's baseline is and then whatever treatment regimen we start with, whether it's pharmaceutical, whether it's regenerative or non-chemical or non-invasive, whatever the therapeutic regimen is, we're going to track that over time.

So we're going to learn pretty quickly if it's working or not. I'm a bit of a curious per-



son. So I've always thought a lot about cell therapy, stem cell treatments. What does the future hold in terms of restoration and how can we make our surgical procedures better, less invasive? And that's how we ended up doing these less invasive hair transplants, which instead of a scalpel stitches and linear scar left behind, we can take the individual follicles one at a time. So that brings you up to speed in terms of the different types of techniques and technologies we use.

*So how do you see your industry of non-invasive hair restoration and biohacking colliding and what type of methods do you use from biohacking to support that type of less invasive therapy?*

Well, as a biohacker myself for many years, I do everything from tracking my sleep to time-limited feeding and even wear minimalist shoes and things like that. It's funny, people used to just call us health gurus and health nuts, and now it's biohackers, because we've got all this technology available to us such as wearables, like the Oura ring and heart rate variability tracking and whatnot. We're going to take a more holistic approach today towards hair restoration than we ever did in the past. And we know that things like stress and the allostatic load, have deep effects on our body, not just dysregulating sleep and triggering inflammation and poor absorption of our nutrients, but also dysregulating your hair.

So we definitely take a very holistic approach here at Bauman Medical when it comes to hair loss. And so whether it's biomarkers in the blood or genetic testing to see what metabolic pathways might be af-





fecting someone's hair loss and even telling us what kind of treatments might work best, without that trial and error period, those are some of the ways that we really get into personalized precision medicine and apply that towards hair loss patients. So we end up talking a lot about biohacking, maybe not necessarily using that term, but I'm always asking patients who have excessive hair fall, what's your nutritional status? Have you lost or gained any weight? Have you changed your diet in any way, shape or form? Do you think you're nutritionally deficient in any way? How's your sleep-wake cycle going? Does your relationship status have you stressed out? Did you move from one house to an apartment or vice versa? These are all things that can add extra stress and influence our lives as well as our hair.



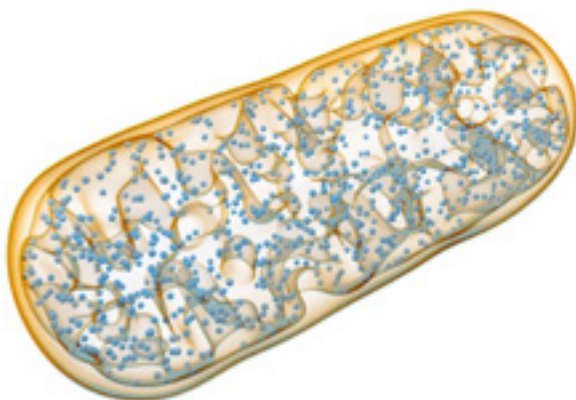


And it can really impair hair growth. And I guess the other key component that's foundational for what we do in terms of hair restoration that many surgeons perhaps don't think about is the health of the scalp before we even start any therapies or treatment. Because if there's an underlying inflammation that's going on, irritation, redness, flaking, dryness, oiliness, something going on at the bottom, before you curate the plants you need to get to the soil of that first.

And so a lot of what we do in the practice is geared towards really tuning up the scalp health before we go forward with any kind of therapeutic intervention. Even if it's something simple, like a topical medication or red light therapy device that they would use at home and of course, hair transplants, we want that area to heal very well. So we certainly don't want it inflamed or delaying the healing process or putting the grafts in jeopardy. And I think unfortunately, a lot of surgeons may just run and jump into doing

a hair transplant for patients and they don't check those boxes. And so very often patients will come from other practices and say, 'Well, I had this procedure, but it didn't seem to really work.' And then we do some diagnostics and we find out that their scalp was exceptionally inflamed. So of course the grafting didn't work as well as it should. Maybe everything was done right with the surgery, but you didn't prep the area properly.

Foundational. That's the word I use for scalp health all the time. People say, well, what kind of shampoo should I use? And, you know, it's almost like a flippant conversation, where it may just be like something they thought of on the way out the door, but let's talk seriously about what's going to affect your scalp the best in terms of its pH level, moisture level, sebum level. Is there an overgrowth of the microbiome of the skin in one way or another, that dysregulates the function of the follicle? Really that's what dandruff is - a disruption of the microbiome and letting fungus overgrow the bacteria that should normally be healthy to protect our scalp over time.



The other thing I take from biohacking, in regards to our scalp health and hair growth process, is that in biohacking we talk about Lifespan and how we want longevity. We want more years in our life. And then we want Healthspan, which is more life in our years. That's the quality of life. Well, my patients also want Hairspan. They want to have more hair in their life and more time with their own living and growing hair. And that's kind of the next evolution of biohacking. When I consider biohacking baldness, what we're aiming for is Hairspan: more time with our own

living and growing hair. And I'm fighting to keep my own hair in that way.

*How do you give advice to your typical clientele in terms of what daily routine, what daily habits they should be doing or should not be doing to keep their scalp functioning at the best possible levels to promote healthy hair?*

I actually have an entire Trichology department that's geared towards evaluating scalp health. So I have a certified trichologist on hand and her assistant is a hair replacement professional, and we also have an esthetician. So in that team right there, we've got a pretty robust breadth and depth of skills when it comes to skin and hair. And what we'll do is we'll take the patient and we'll put them through a scalp analysis, and this is a very detailed process. It takes about an hour and it's not invasive obviously, but what we'll do is look at their scalp health, seeing if there are any symptoms, any itching or flaking, dryness or oiliness. And on occasion, what does their hair quality look like? Is it dull? Is it shiny? Do they color their hair? What kind of processing are they doing, if any, and this is true for both men and for women, what kind of things have they done to try to enhance their hair? Do they use camouflage, powders or sprays? Do they use hair extensions or wigs or weaves or have they ever in the past?

Then we try to get down right at the level of the scalp and look at the pH level, the moisture level, the sebum level. And then we'll look with microscopic cameras to basically take pictures of the scalp to get density measurements. And we have AI powered microscopes today that will look at





and count exactly the numbers of hairs and sort them in terms of quality in the different zones. We'll look with blue light microscopes to see if there's oxidized sebum or overgrowth of certain bacteria in the scalp.

Is there any kind of acne or folliculitis of the scalp that's going on there? Then we'll coordinate and collate all of that information together? And if we need to intervene, then of course we have a scientific scalp makeover program, which might be something that we might Institute immediately, right on the scene. We'll do a therapeutic intervention of the scalp, and it might include a pre-shampoo and exfoliation with a hydrodermabrasion device. It may include the application of peptides or growth factors into the scalp. It might include some kind of conditioning therapy ozone treatment for the skin. It could include a heat and steam treatment for the scalp as well to open up the pores.

There's so many different things that we can do depending on what we find in that initial evaluation. And we can try to figure out from there what we need to do at home to switch out your scalp hygiene routine. Maybe you've only been shampooing every third day or something like that. You need to be doing that more, or maybe you're using the wrong conditioner, and we need to switch that up a little bit, or maybe you need some kind of additive to soothe the scalp to take out the inflammation. We've got a couple of customized scalp treatments that my trichologist has put together, chemistry-wise and herbal treatments that act as scalp therapies customized specifically for the patient, depending on what they need. The main one that we use is called the First Responder. And

that's just a soothing treatment that folks can do at home. So that all that has to get rectified before we even start with the hair growth regimen.

*When you're looking at the hair, does anything ever come to mind immediately, like this person isn't getting enough of this nutrient, maybe they need to consider this supplement or consider this treatment or anything like that, or does it take a little bit more analysis to figure out exactly what might be missing?*

Well, one of the things, after talking to so many patients, that I realized over the years is that there are absolutely nutritional supplements that work. And how do we know that? Well, just simple stuff like high-dose biotin which is very, very safe - 10,000 micrograms a day, for example, can really improve the health of the hair and the hair production, and we've tracked and monitored this over time. So does it work on every single person? Well, obviously not. If their biotin levels are good, and they don't have a biotin aberration in that metabolic pathway then maybe they don't need biotin supplements, but when we do see those cases where bio supplementation might be helpful, and we use the biotin and measure the improvements over time in those interval zones, maybe 90 day intervals and see how they're doing.

Think about this for a moment: the hair follicle is a very highly metabolic organ. It's a very highly metabolic cell population and your body expends a lot of energy just to make hair. You've got 150,000 hair follicles on your scalp and 5 million of them on your body. And they all produce about a third of

a millimeter of hair a day. That explains your five o'clock shadow either on your beard if you're a man or on your legs if you're a woman. And the interesting thing is that in order for you to grow just like a gram of hair - which is about as much as you could stuff into a sugar packet - requires about 630 kilojoules of energy to produce. So that's like 15 minutes of vigorous exercise.

And so obviously if you're nutritionally deficient, the first thing that's going to hap-





pen is your hair follicles are going to start to slow down. You're not going to produce good quality hair. Hair is kind of like a luxury item in the body. And so if you're not getting enough protein, as we know, for example, anybody over the age of 30, collagen levels can go down. And so we use collagen supplementation very often to increase collagen levels and that improves hair and skin and so forth. So there are other more "offensive" products, like multivitamins and things like the biotin I mentioned, we call that the HERO, the collagen we call the BUILDER, and the multivitamin we call the A-LIST.

And then there's "defensive" treatments too, like things that boost your immunity so that you don't get COVID infection and things like that. We call that the BODY-GUARD and things to block levels of stress, or make yourself more adaptable to stress, more resilient to stress like Ashwagandha and we call that the ZENMASTER. And so there's a bunch of different things that we have under the Bauman brand, depending on what the patient might need in terms of improving their hair health, their scalp health, and hair growth. But yeah, nutrition is a big part of it. We do a lot of nutrition-

al counseling, as well as looking at their blood levels. Are they anemic, deficient in iron and things like that or dysregulated in terms of hormones. There's a lot of a variety of different things that we can uncover in that initial evaluation, with blood tests and genetic testing as well.

*What about someone, that everyday person using shampoo and conditioner - how often should they wash their hair? Can you wash your hair too much? I guess everyone is different, but generally are there certain consequences you find with certain types of treatment in terms of shampoo and conditioner? Is the top shelf stuff that much better than the bottom shelf stuff? Is it going to make that much of a difference?*

Well, there's a lot of thought that goes into, you know, how often you should shampoo, and you should always follow that with a conditioner, obviously, because shampoo is designed with a certain level of surfactancy, which is the stuff like the detergent that cleanses the scalp and hair. Conditioner puts the conditioning back into the hair. And so we have our own hair care products. We have the BOOST line, which is specifically for hair regrowth. And then we have the SOOTHE line, which is specifically for lowering inflammation at the level of the scalp. And some people go back and forth between the two, but that's a lot of what we uncover in the Trichology evaluation. Because if your scalp is producing a lot of sebum today, well, you might need to shampoo every day or even twice a day if you're working out, for example, but later on in life, maybe a decade later your sebum production is less. And so you only need to shampoo every oth-



er day. Some folks come in and say that they only shampoo once a week. Well, let's take a look at the scalp and see if that's the right thing for you. You probably will need to increase that. Then of course, whatever therapies or treatments we do, if we're going to put some kind of a topical medication into the scalp, you might find that you need to shampoo a little bit more often just to exfoliate the scalp. For example, with some of these treatments you might need to use red light therapy, laser light therapy to improve the sebum production at the level of the scalp to keep the scalp moisturized, as well as improve the hair growth and that's what red light therapy does.

*So there's some people that get into the more holistic side of things, getting away from shampoos and conditioners and instead incorporate more at-home treatments like argan oil into their hair or olive oil treatment and all those types of oils that have some therapeutic or other effects. What are your thoughts on those? Is there enough research behind that to really support that it really does help the hair?*

Well, a lot of these products and treatments that you may think are old wives tales or whatever, a lot of it has some basis in science. And so now with the science of scalp health really increasing at such an exponential rate, my trichologist would probably be the one to be able to tell you, which ones are really geared up and working for patients. I know she has a very specific base that she uses for people who have dry scalp. And then there's a different one for people who have a really oily scalp and then there's different additives. My shampoos have over a dozen different essential oils that have been proven in clinical trials to improve hair growth.

You know, there's a lot of interesting data on essential oils for hair growth. And actually one of the more exciting new things that we learned just this past year was that hair follicles have an olfactory sensor within them. And so the same kind of receptors that you have in your nose, that sense of smell is found in the follicle. Let's say sandalwood, for example. There's a similar type of receptor in your hair follicles and sandalwood can actually trigger a change in hair follicle metabolism. So what the clinical data and the scientific data shows is that sandalore,



which is a derivative of sandalwood, has an effect on hair follicle metabolism. And so we included sandalore in our shampoo and conditioner pair in the BOOST. And we call that the olfactory technology because olfactory is typically associated with your nose and now your hair follicle has a chemoreceptor for sandalwood or sandalore.

We don't really know the answer to that evolutionary outcome. Maybe it has something to do with how we sense our environment and so forth, but the fact that it regulates hair growth is just like a hack, a biohack. We're using an old mechanism of action, something ancient that we don't need any more and leveraging that to our benefit to grow more hair. That's what sandalore has done. And it's super exciting. I think red light therapy is kind of similar to that. We all know that that single celled organisms and primordial earth lived in this peace soup kind of world, you know, and they survived on heat and light, and that was about it. And the red light coming through the primordial goo of the atmosphere, if you will, is what kept those microorganisms, single cell microorganisms alive, and mitochondria derived from those, and we've got 40 quadrillion of them or something like that in our body?

But those mitochondria are receptive to red light energy. And the good news is that if you need to make more energy right at the level of the follicle, for example, you can shine a red light and red low level laser light therapy is a very powerful way to activate that ancient pathway and provide more energy to the hair follicles.



*What does your typical day look like and how do you keep your energy up and stay in tip top shape as you're going throughout the day, going to surgeries, going to meetings, all that type of stuff?*

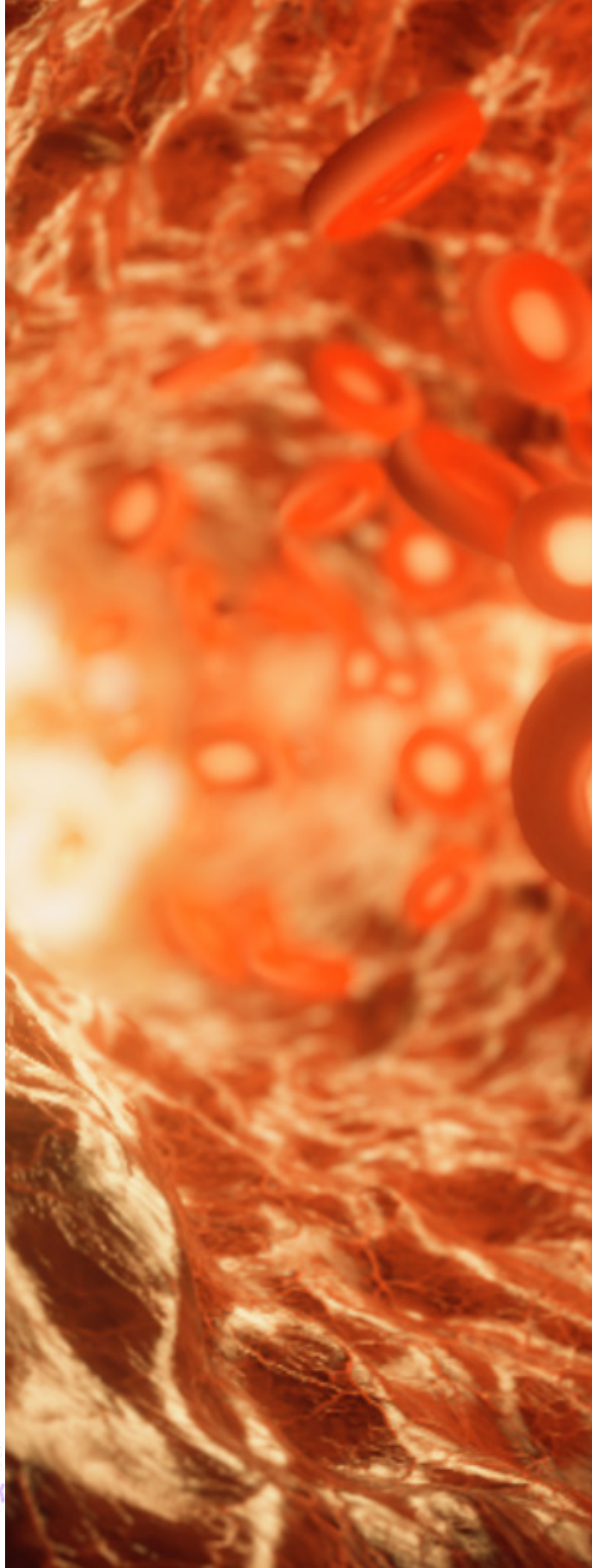
Sure. So, I don't sleep late during the week. I'm up at five every day. I'm at the office by six and patients are arriving around the same time. And so as we're getting those patients ready for their minimally invasive hair transplant procedure, we're prepping surgical planning photos and so forth. There are different parts of that procedure that I may be assisted by my team, for example, the preparation of antiseptic preparation and anesthetic, the local anesthetic and such, which is going to go into the scalp



to keep them comfortable. And then once I'm in the procedure room, I'm in my zone. I'm making the sites where the hairs are going to be implanted. That's my workshop, if you will.

That's where the artistry takes place, the angle, the orientation, the position of the hairs to make sure that it looks totally normal and natural when it grows in. It doesn't look like a transplant. It matches the patient's apparent age obviously. And so keeping everything looking normal and natural requires a lot of my focus and energy. As I mentioned earlier, I am on a time-limited feeding diet, so I don't really take a break for lunch or anything like that. I usually have a snack around two o'clock. I eat my main meal somewhere around six o'clock once I'm home. And then of course I don't eat again until that next day at two o'clock. On the weekends it's whatever the family wants to do, whatever they would like. But each day during the week, it can be pretty intense.

Each surgical procedure is a 20-man hour job. So it's me plus my team. There's different phases, as I said, harvesting, for example, implantation, which is handled by my team, and I'm tracking and checking on that as the process is going along. We might be doing procedures that are specifically for male pattern baldness. We might be doing female pattern hair loss, where we've got to go in between existing hairs. So that's a delicate process. We might be doing PRP or other regenerative treatments with that at the same time. I have other patients coming in for evaluation and tracking either post ops or initial consultations, and we're doing evaluations of their hair growth.



I have about 30 team members, half on the surgical side and half on the administrative side. I do have a nurse practitioner who assists with my regenerative treatment. So for example, the PRP treatments that patients are coming in for, and the newer technology like PDOgro, which is the polydioxanone threads that we apply with the PRP. We also do exosome therapy topically on the scalp that seems to be helping with healing and hair growth. So we're super excited about that. And we've got some new technology that's coming our way that we've been testing and trying out as well.

***Can I get a sneak peek on any of the new technologies?***

Yeah, so some of the new technology is all in the noninvasive realm. So, some of the things are going to be enhancing our PRP treatment. So when we're doing our procedures under local anesthetic, we can now harvest hair follicle stem cells from the healthy areas of the scalp and turn that into a therapeutic modality, including that with our PRP. That's a relatively new technology here in the United States, there aren't too many physicians who are doing that, but there's a lot of great, great data and presentations that I've seen overseas at some of the conferences within the past couple of years. So we're going to be conducting our own clinical trial work on that shortly, and that'll be released to the general public soon.

And then I'm happy to say I'm one of the first to be able to provide a Trans-Epidermal Delivery system for hair growth serums here in the office. So this is a non-chemical noninvasive, no needle treatment in the office. It takes literally less than half an hour



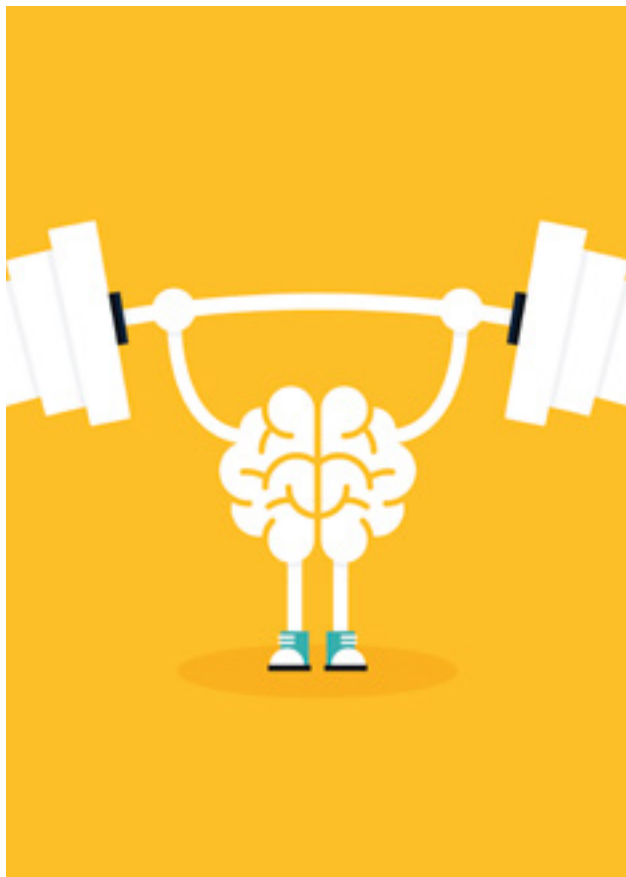


with no preparation and no downtime, no interruption in your day whatsoever using what they call Sonophoresis. So that is the methodology of using ultrasonic waves to deliver molecules through the skin, without hurting the skin, literally without an injection, without disruption of the skin, without any kind of wounding or bruising or any kind of discomfort whatsoever. And so this is brand new technology. This is a game changer technology, and you can get a hair growth treatment without having to give blood, without having to get injections, without having to get local anesthetic. It's going to be pretty exciting. There are physicians that have just recently published and presented on hundreds of case studies with this technology that was developed in Israel and now available around the world. And we're excited to be one of the first in the United States to be able to provide that for our patients. So I'm really looking forward to that Trans-Epidermal Delivery system, 'TED'. We'll be launching that as well as doing our own initial trial work here with that device when it arrives.

Sonophoresis is a really, really cool technology and obviously it's going to really change a lot of things in cosmetic medicine, not just hair, because if you can deliver medications through the skin much more easily without having to worry about, liposomal deliveries or injections or things like that, it's a game changer. So we're really excited about that technology.

***Can you talk to me a little bit about your foundation and what your mission is and who you're setting out to benefit the most?***

The Bauman Philanthropic Foundation is something that we created many years ago, and it really came out of a lot of our pro bono work that we did and that we've been doing for over two decades. So even in the early days of the practice, if there was a patient who needed some degree of restoration from an injury or trauma, a child accident or something like that, we always took those cases kind of under our wing, so to speak and, and provided those treatments and procedures pro bono. And that would also include some things like cranial prosthetic devices, where we've worked with some of the major manufacturers around the world, for example, folks who are not candidates for hair transplant surgery, and they have severe burns and they need a cranial prosthetic that's customized for them. The Foundation has helped them as well.



So we've done burn victims, young patients. We helped a 13-year-old boy who had a birth defect in his scalp and was very self-conscious about it in middle school and we did his restoration pro bono. We provide a lot of pro bono work also for military veterans, who have been injured in the line of duty protecting this great country. If they've had a burn or trauma or injury to the scalp that has diminished or impaired hair growth, we take those cases under consideration. They do have to apply through the foundation. We also support other educational organizations here locally. My wife is a teacher and just retired last year. And so there's a soft spot in our foundation for educational opportunities as well.

So not just in hair restoration, but also education. And, I guess that leads to my other passion is, helping military vets avoid PTSD-related suicide. I am the volunteer medical director for Grey Team. Greyteam.org is an organization 501c3 here in Boca Raton. It's a physical facility that runs about 20 to 25 veterans through their program every 90 days. We have never lost a veteran in the years that we've been treating and taking care of those veterans. I think we have 600 of them and have not lost any of them yet. And it provides a nice social network. We also provide nutritional one-on-one personal training, guidance support, as well as all of my favorite biohacks. We have saunas, total body photobiomodulation. We do the 'Hapbee', which is the pulse electromagnetic field for mood.

We also have the Weber devices for transcranial photobiomodulation. We track heart rate variability. We've got different types of wearables that a lot of the veterans are using to tune themselves up and elevate themselves in terms of their health and wellness and wellbeing. It has its own gym and we do full body scans there so we can track their weight and health over time. We also do fun activities - sometimes we're playing pool or there's movie nights. A good friend of mine Cary Reichbach is the founder and the CEO of that organization. And it is really one of the most well-known 501c3 nonprofits here in South Florida, if not around the country now, for taking care of military veterans.

My good friend and philanthropist, celebrity hairstylist Martino Cartier says, 'If you don't know how to give, then you don't know how to live.' And so we try to live by those words. Martino is well known for donating wigs and haircuts to women who are undergoing cancer and all those patients get treated for free in his New Jersey salon. And he also raises a huge amount of money for kids with cancer who are basically looking for different wishes and things like that, whether it's trips to Disney or celebrities that they want to meet, things like that. So, I learned from Martino, a philanthropic hero.

*You were talking about hairstyles, I wanted to ask what would be the hairstyle you would have if it was socially acceptable today?*

Ha, well, wait a minute. What hairstyles are not socially acceptable? Well, so I'll take you back to when I was in medical school, I had long hair, I had a ponytail and I enjoyed my hair. I loved my long hair. I did cut it a few days prior to graduation, because I knew I had to get a job as an intern and a resident at a hospital and I had to interview for those



positions. I did grow my hair a little bit longer during COVID, but it just didn't look the same as it did 30 years ago. Of course, my wife likes it a little bit short, so if she's happy, then I'm happy too. But I do like my current hairstyle. I'm pretty flexible in sometimes letting it grow out bigger, thicker, longer. But if you look back at some of the photos and headshots from the COVID days, it does look a little crazy, a little bit mad-professor-ish. But I do like to keep it more organized and I'm kind of a simple guy when it comes to styling. So I like a quick, easy style that I can do in the morning on my way out the door in a quick fashion. So a little bit of paste right after a shower and I'm ready to go. Low maintenance.


*Doctor, it's been an absolute pleasure. I know I've learned a lot. I'm sure everyone reading and listening has learned a lot. I'm going to leave you with the last words to let everyone know where they can find out more about you, if they're ever interested in learning more about your practice.*

So whether you have a scalp health problem or you notice some thinning or shedding, if your hairline is receding or you're thin in the crown, or even if you're just looking at your family saying, wow, I don't want to be like uncle Bob with the baldness, the most important first step is to get an evaluation and a diagnosis quickly. And sometimes we say in the world of hair, that "Time

is Follicles". And the reason why we say that is because for every moment that you delay, that you try some vitamin that maybe is not the right thing for you, or switch up some shampoo thinking it's going to grow some hair, you're losing time, especially with the hereditary hair loss process. So, "Time is Follicles". That means get on top of it, go to [Baumanmedical.com](http://Baumanmedical.com), check out the information there. You'll see everything about my background and my history and the 33,000 patients that we've treated over the past 25 years in practice and then select start consultations, schedule consultation, click on that, and just drop your name and phone number in there or email.

And we can connect from anywhere in the world. Actually, we do connect with folks obviously through social media, but I like to get the data, the information, the photos sent in through the website. So that would be the first most important step. The site is [Baumanmedical.com](http://Baumanmedical.com), click there and it's a short form. Even if you just have a question, you can also go to [Baumanmedical.com/ask](http://Baumanmedical.com/ask), and you can just ask me anything about hair loss or anything that strikes your fancy. And I will personally respond and get the information back out to you. But, don't sit around struggling with hair loss. There's no need to do that. Hair loss is optional today and if you want to look good and feel great, then you just got to start your journey and that long journey just starts with the first step and we can chat about it and see what's right for you.





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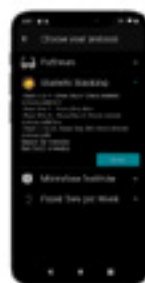
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"I give this 9 out of 10 Biohacker Points."  
**Andreas Breiffelt - Redbull Biohacker**

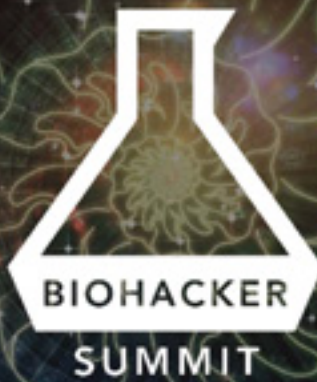


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# An Account of the Recent Biohackers Summit

by Jessica Alana

Well, first of all, kudos has to be said to Teemu Arina, Dr. Olli Sovijärvi and the rest of the Biohacker Summit team for orchestrating such a tremendous show! I was lucky enough to not only attend the whole summit but speak for the first time; how exciting!

My trip kicked off on Tuesday the 31st of May with an early flight from Gatwick, London airport, to Helsinki, Finland. Shortly after, I was shuttled by taxi to the summit's partner hotel, Hotel AX, which resided in a great location in the city centre.

Red balloons greeted me in my modern hotel room with a message that I was the first guest to ever stay in room 402! How sweet.

Being super tired from the day's travels, I ordered chicken soba noodle salad from the hotel restaurant and got an early night, ready for the Optimised Day Workshop the following day.

I boarded the biohacking bus at 9 am sharp after fueling myself on the hotel's complimentary breakfast. I was ready to attend the Optimised Day Workshop and acquire a wealth of biohacking knowledge from the greats! After a peaceful ride, mostly looking out the window at Finnish nature, we arrived at the Optimised Day Workshop site.

The day was set at a quaint wooden cabin with a majestic view of the lakes and accompanying boats; a good choice from the team. Of course, we were met off the bus with an authentic biohacking coffee consisting of Teemu's unique blend. Shortly after, the learning experience began with lectures from the likes of Olli, Jaakko Halmetoja and Shawn Wells. Additionally, we were blessed with sound healing from Jani Toivonen and yoga from Tuuli Sofia.

This was the day I stumbled upon an outstanding device called The NeuroVizr, which somehow gave me a 15-minute psychedelic trip just by flashing a white LED light at my central brow area (third eye). The evening came, and so did the glorious Upgraded Dinner and lots of red wine cheers.

The following days can only be described as a dream. Being a part of the globe's best biohacking summit is incredible. The venue was kitted out to impeccable detail, with the decorum inviting every being who walked into the room to step out of their comfort zone and



learn something about themselves. A dedicated community-driven project like no other.

I took the summit's first day to relax and have a good time whilst dipping in and out of interviews with similar minds.



As the first day came to an end, I began gearing up for my speech; 1:20 pm on Saturday was the big moment for me. A mix of nerves and excitement began to wash over me, but I knew that if I had a good dress and heels, it would take half the pain away, haha! I entered backstage at around 1 pm on Saturday, ready to go and no longer nervous. I was calm and collected. I knew my subject well and had prepared a cute presentation about Hyperbaric Oxygen's regenerative capabilities compared to a salamander. With 30 seconds to go, I stepped out on stage and immediately let the energy take over me. I'm so glad I pushed myself out of my comfort zone.

I guess being a public speaker is a balancing act of vulnerability and showman-ism. But for sure, I know it is right for me, and I can't wait to continue to connect with people through the medium of public speaking.

The Finnish Maldives (lol) was the location for the Upgraded Offsite. Being surrounded by

so much beautiful nature made a significant change from the concrete jungle of London. Connecting to Mother Nature is truly what life is about.

My closing thoughts are full of gratitude, peace and inner knowledge. I feel like I have developed a new sense of character development leaving the summit. I met extraordinary people that week who have impacted me in soul-touching ways.

I'm proud to announce that I will be speaking again at the next Biohacker Summit, based in Amsterdam, on October 14th-15th. This time, I will be presenting a topic very close to my heart, being Post-Traumatic-Stress-Disorder (PTSD). Having overcome a severe bout of complex PTSD just over a year ago, I can't wait to share my innate thoughts on how to combat depression and anxiety and how to let go of the pain in your past, honestly.

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## ABOUT JESSICA ALANA

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“Jessica holds a specialist degree in biomedical sciences which she uses to robustly pursue her passion for holistic health and wellness. After losing her mother to a long battle against mental health in 2019, Jessica lost faith in conventional medicine and the pharmaceutical industry”.  
Quote: “Medicine has become a place

of greed, it is no longer valuable to the pharmaceutical industry to create cured patients, rather, they are looking for customers for life.” “I believe we are given life on Earth to help others grow and the planet to heal, once this is achieved by each individual, we can enter moksha.”

Website:

<https://www.thewellnesslab.com/>

# ACKNOWLEDGMENTS

There is so much support behind our cause and we are eternally grateful. As a new company fresh off the block, we've had our fair share of challenges but because of all of our supporters, we've overcome them and produced, becoming more humble and stronger along the way.

Our many thanks to all those who made this possible:

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## **GENERAL ACKNOWLEDGMENTS:**

Many many thanks to our partners, kids, friends & family who all had to suffer because of the long hours we put into building this magazine.

Also we of course have to thank our subscribers, readers and followers on social media for supporting us along the way! You all ROCK!

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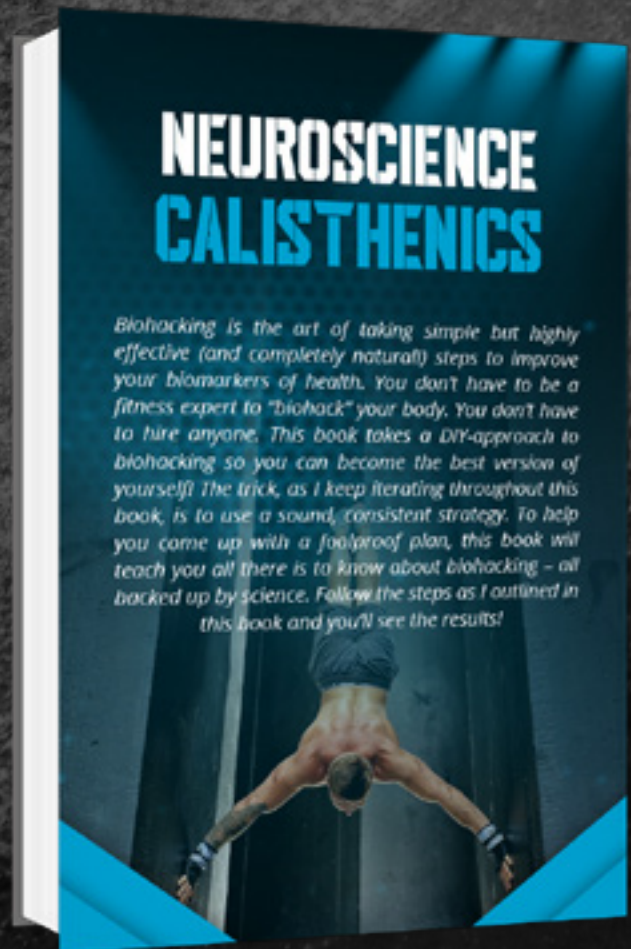


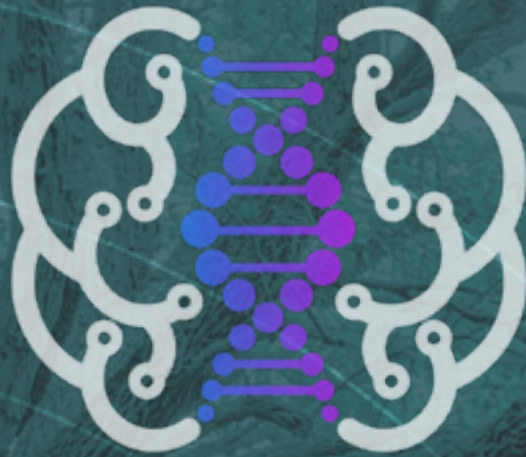
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