

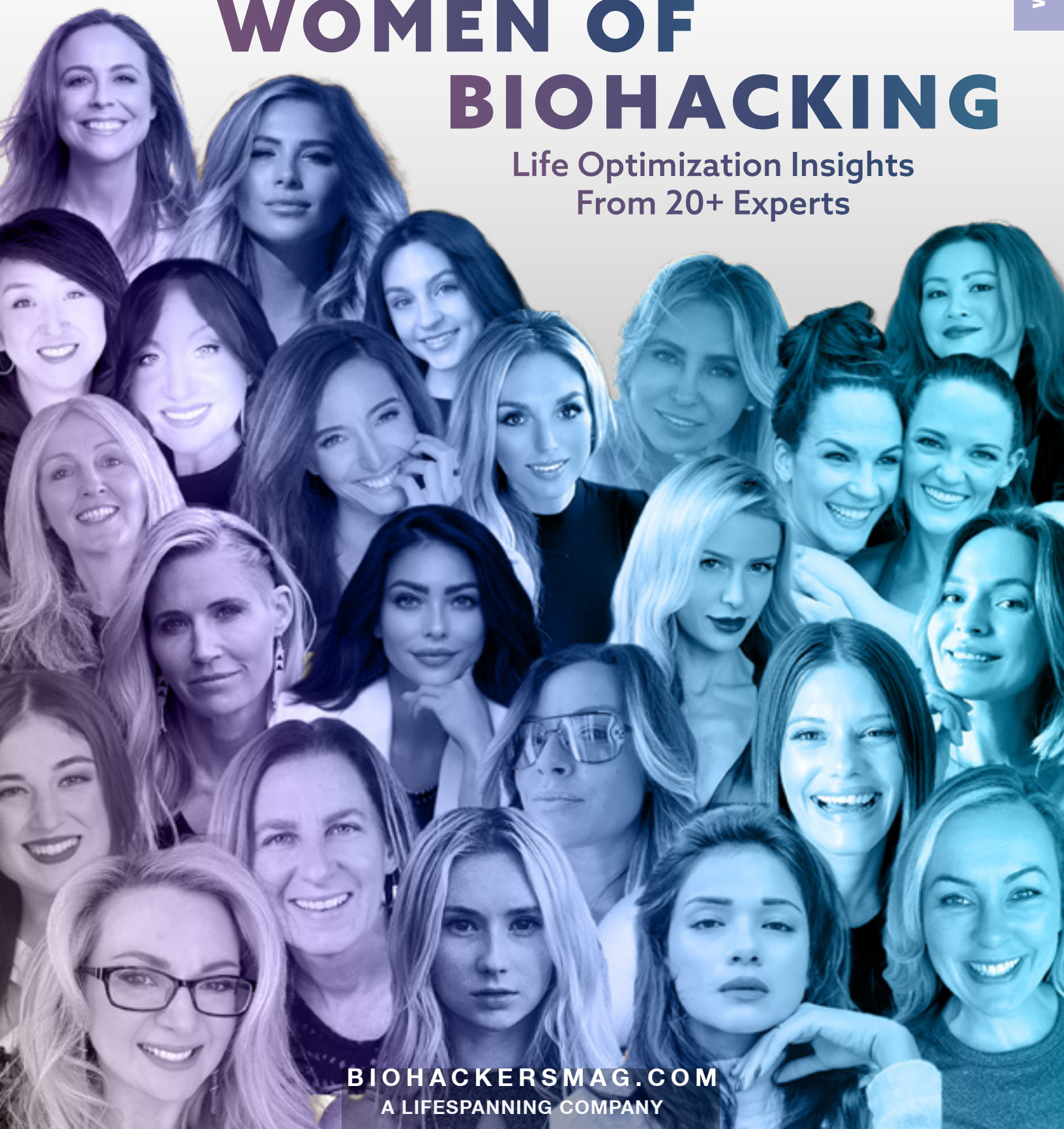
BIOHACKERS

LIVE FIT. LIVE WELL. LIVE LONG.

WOMEN OF BIOHACKING

Life Optimization Insights
From 20+ Experts

WOMEN'S SPECIAL EDITION



BIOHACKERSMAG.COM
A LIFESPANNING COMPANY

BIO HACKERS WORLD

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Explore Biohacks
Unlock Your Potential



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Biohacking Reimagined

In the world of biohacking, where science meets self-improvement, a paradox surfaces. Our relentless pursuit of health optimization—through cutting-edge protocols and intricate regimens—often leads to stress, ironically counteracting our wellness goals.

Are we enhancing life, or just obsessing over optimization?

In rediscovering health's essence, we find joy in simplicity: fresh air, balanced diets, exercise, and meaningful connections.

This realization births "Lifespanning" - a harmonizes the pursuit of longevity with the essence of living fully. It's about adding life to years, not just years to life.

Join us in embracing Lifespanning: a movement that celebrates life's richness, balancing biology optimization with the simple, profound pleasures of existence. Because true wellness is not just about how long we live, but how well we live each day.

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WE ARE THE LIFESPANNING COMPANY.

Our Company is building a huge reputation by educating, informing, and inspiring global audiences through our dynamic collection of media brands. Each business invites and engages people to explore the ethical, social, and philosophical implications of longevity exploration in the modern world.

Lifespawning unites the best of the physical and digital worlds through a collection of dynamic media assets that generate

demand through Culture, Connection, and Conversation to grow Community and ultimately deliver omni-channel Commerce.

The Lifespawning Company is changing people's lives while generating revenues. This first-of-its-kind business is home to a collection of brands that include our Magazine, Podcast, Event, Academy, Marketplace, Coaching and our NPO for Certification.

THE LIFESPANNING COMPANY



BIOHACKERS

LIVE FIT. LIVE WELL. LIVE LONG.

A LIFESPANNING COMPANY

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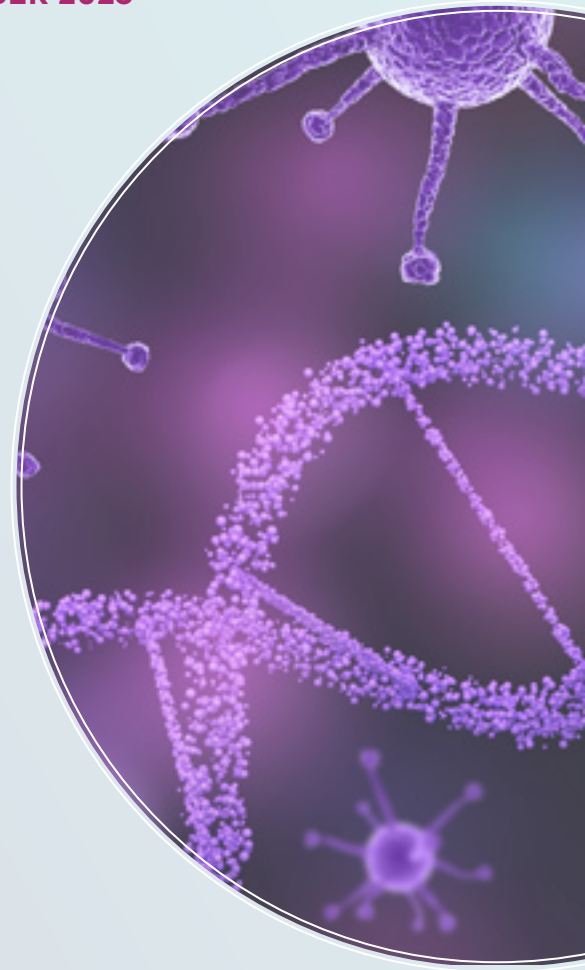
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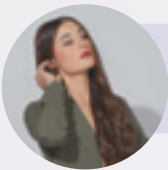
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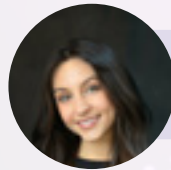
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A heartfelt thank you to all the brilliant contributors who infuse our magazine with groundbreaking ideas, provocative insights, and valued storytelling.

Your dedication and creativity make this publication truly exceptional. We are grateful for the passion and innovation you bring to each page, shaping a magazine that continues to inspire and captivate our readers.



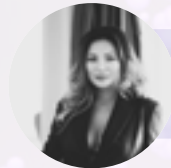
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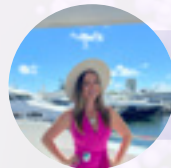
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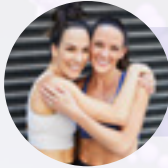


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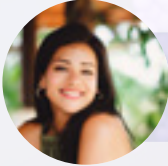
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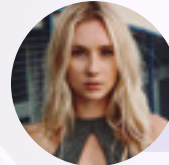
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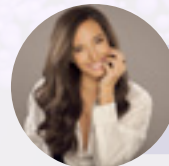
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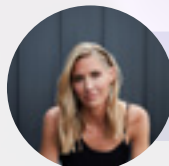
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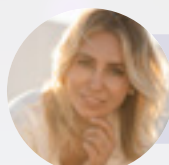
Mary Cristine



Amy B. Killen



Dr. Julia Jones



Natalia Naila

THIS ONE'S FOR THE LADIES

Let's get straight to the point, - this Women's edition is long overdue. The impact women have made on the health and wellness industry, in every well-to-good industry, has been monumental to say the least. While in the past men have traditionally been the front face of the wellness and optimization movement, there has never been a successful and fruitful endeavor without the heavy influence of women working humbly in the background behind the scenes. Over the past few years and up until now, there have been new faces rising to the front of the stage, faces that represent all the women in the movement who have preserved so diligently to serve the wellness community.

It is profoundly inspiring to see women authentically and so effectively taking the center stage. After many years of being in the man's shadow but still working with resilience and integrity to the greater good, the limelight has found these strong women and allowed a remarkable shine to exponentially spread across the biohacking and optimization communities. This feminine-glow doesn't take away anything from the masculine luminescence, but rather brings fresh perspectives to combine with it, creating insights that represent the strongest men and women, all directed towards the overall health and value of the human life. Lifespanning is exactly this. Increasing the quality

and the quantity of our years on earth should not come at the hands of following the advice one or two well-known influencers. It should come by taking an inclusive, well-rounded, and communal approach based on the truth. Intuitively, women seem to have an easier way to connecting to this inner truth that guides us -at least I think so. Because of this, it is absolutely necessary that men and women combine their visions to drive our health and lifespans forward ethically and effectively.

As Biohackers Magazine, we believe it's important for all of these women to have a voice that reaches beyond the niche of biohacking and wellness. Publishing this edition is not where this ends. We plan to do more editions like this one and have more women representatives in our regular editions. Beyond that, we need to promote the values that these women bring to the table, to all those who need their knowledge that may be outside the narrow (but growing) biohacking and optimization industry. By increasing awareness of this issue, promoting afterwards, and bringing these women into important conversations, we are all doing our part to further the cause of lifespaning, biohacking and optimization through rightful, practical, and balanced insights that represent the best of both sexes.

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.

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THE INSPIRATIONAL INFLUENCE OF WOMEN IN THE LIFESPANNING JOURNEY

Embracing the Essence of Diversity and Balance

In the ever-evolving landscape of science, art, and technology, the influence of women in shaping my vision and enriching the Lifespanning philosophy is profound and deeply personal. As a thinker, scientist, and entrepreneur, my journey has been significantly enhanced by the diverse perspectives, innate resilience, and creative insights women bring to the table.

The Art of Balance: Women as the Catalysts of Aesthetic Science

In the realm of Lifespanning, where the objective is not just to extend life but to enrich its quality, women have been instrumental in integrating aesthetics with science. Their ability to balance functionality with beauty, and efficiency with grace, has inspired a more holistic approach to biotechnology and biohacking. This synergy between art and science, catalyzed by the touch of feminine insight, has been a cornerstone in developing strategies that don't just prolong life but make it more vibrant and fulfilling.

The Science of Resilience: Learning from Women's Innate Strength

Women, through their unique life experiences, embody resilience—a key factor in longevity. Observing and learning from their ability to adapt, overcome, and thrive has infused my work with deeper understanding and empathy. This resilience is not just a survival mechanism but a source of creativity and innovation, driving forward the frontiers of Lifespanning.

Aesthetic Intelligence: The Women-Led Fusion of Beauty and Brain

In my endeavors to marry science, art, and technology, the role of aesthetic intelligence, prominently exhibited by many women I've encountered, cannot be overstated. This blend of creativity and intellect is crucial in making scientific advancements relatable and accessible. It's about designing experiences and solutions that are not only effective but also emotionally and aesthetically resonant.

The Future Vision: Women as Pioneers of Lifespanning

Looking ahead, the role of women in shaping the future of Lifespanning is indispensable. Their insights and leadership in biotechnology, genetics, AI, and VR/XR are pushing the boundaries of what's possible. They are not just participants in this journey but are leading the charge in creating a world where longevity is coupled with vitality and a higher quality of life.

Conclusion: A Tribute to the Women in the Lifespanning Odyssey

As I continue to explore the convergence of science, art, and technology, the inspiration I draw from women is a constant source of strength and enlightenment. Their influence permeates every aspect of Lifespanning, making it not just a scientific pursuit but a movement enriched with diversity, creativity, and balance. In celebrating their impact, I am not only acknowledging their contributions but also reaffirming my commitment to creating a future where the essence of life is not just preserved but beautifully enhanced.

About Jean Fallacara



Jean, a visionary entrepreneur and neuroscientist, is a pioneering biohacker and founder passionate about merging science, art, and technology. With a remarkable IQ of 167 and an MIT background in AI, VR, XR, Biochemistry, Genetics, and Biotechnology, he's earned numerous awards and distinctions. Having founded ventures like Z-Sciences, he strategically led its acquisition by inTEST Corp in 2021. As the Founder of Lifespanning Media, Jean aims to mainstream human longevity, emphasizing well-being and longevity exploration. His mission involves social connection, life-science education, and multimedia content to redefine lifespan boundaries. Beyond technology, Jean embraces a holistic lifestyle in Miami Beach, prioritizing family, self-optimization, and gratitude.

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THE MATRILINEAL DANCE: SHAKTI & MITOCHONDRIA

In Hindu mythology, the concept of Shakti embodies the divine feminine energy that pulsates through the cosmos, creating and sustaining life. It is a force that is revered as the very essence of existence, and interestingly, science finds a parallel narrative in the matrilineal inheritance of mitochondria – the biological powerhouses within our cells.

Hindu mythology portrays Shakti as the primordial cosmic energy, the dynamic force that both creates and animates the universe. She is the consort of Shiva, the god who represents the ultimate reality. The cosmic dance of Shiva and Shakti symbolizes the ceaseless interplay of creation, preservation, and destruction, with Shakti embodying the life force that fuels this eternal dance.

Now, let's journey into the realm of science. Within the intricate dance of cellular biology, mitochondria play a pivotal role as the energy producers in our cells. What's intriguing is the exclusive maternal inheritance of mitochondria. As we delve into our scientific understanding, we find that every human inherits their mitochondria solely from their mothers.

The portrayal of women as the life force of the universe in mythology aligns with the sci-

entific reality that women, through mitochondrial inheritance, are indeed the carriers of a vital component of our cellular energy.

This harmonious intersection of science and spirituality invites contemplation on the interconnectedness of our understanding of the universe. It suggests that ancient wisdom and modern science can converge to offer profound insights into the nature of existence. The divine feminine energy celebrated in Hindu mythology resonates not only in the spiritual realm but also in the very cells that compose our physical being.

As we marvel at the parallels between Shakti and mitochondria, let us appreciate the beauty of how diverse cultural narratives and scientific truths can converge, shedding light on the intricate and interconnected nature of the cosmos. In recognizing the roles of women as both spiritual and biological bearers of life force, we find a rich tapestry that weaves together the threads of mythology and science, inviting us to explore the boundless mysteries that connect us to the universe.

About Arjun Chauhan



Born in India, Arjun is a 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 for nature, he is currently in the foothills of Himalayas, in the northern part of India.

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LIFESPANNER-IN-TRAINING

Dear Biohackers Community,

It is with immense excitement and a deep sense of purpose that I pen this introduction. As the newly appointed Chief Operating Officer of The Lifespanning Company, I join you on a revolutionary journey—an experience where science, art, and the zest for life converge.

Biohackers Magazine is now a Lifespanning Company, and this is more than a concept; it's a philosophy, a way of life. It's about striking that delicate balance between optimizing our biology and savoring the joy of existence. This approach melds the precision of science with the beauty of art, the rigor of academia with the practicality of day-to-day life, and the vitality of active pursuits with the tranquility of passive reflection.

My role in this vibrant tapestry is to lead and facilitate. I bring to the table a toolkit forged in the fires of strategic operations and a heart passionately aligned with our collective vision. Together, we will navigate the intricate dance of altering both our internal being and the world around us. The goal? To master the elements that contribute to our lifespan and, more importantly, to our life's richness.

Lifespanning isn't just about adding years to our lives; it's about adding depth, joy, and fulfillment

to those years. It's about ensuring that the extra time we gain isn't just time spent, but time lived—with purpose, with passion, with presence.

As I embark on this journey with you, my commitment is unwavering. I pledge to be a catalyst in our shared quest to redefine the essence of living. Together, we will explore new frontiers, not just in longevity but in the quality of life that longevity brings.

I am thrilled to be part of this pioneering community, and I eagerly anticipate the collaboration, innovation, and transformation that lie ahead. Let's embrace this adventure with open hearts and minds, as we redefine what it means to live a fulfilled, Lifespanning existence.

Here's to a future where every moment counts, where every day is a testament to the beauty of life.

Sincerely,

Jonathan Singer Chief Operating Officer

About Jonathan Singer



Jonathan, a Canadian-born agency chief, operations executive, and experiential creator based in Los Angeles, is a passionate entrepreneur with a deep commitment to brand building. Graduating with honors from Clark University and McGill University, he cultivated expertise in experiential marketing and brand activation, working with major brands. Jonathan's entrepreneurial journey includes founding JSEM, a renowned experiential marketing consultancy, and later joining SUBNATION MEDIA, where he developed Web3 marketing programs. In 2022, he became EVP, Managing Director, showcasing his prowess in global brand marketing. Currently, as Co-Founder of THE LIFESPANNING COMPANY, Jonathan pioneers longevity exploration through a diverse platform, emphasizing print media, digital content, education, events, life-coaching, and e-commerce. Outside work, he values family, wellness, and the Southern California lifestyle.

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Insights from 20+ Top Biohacking Women

Amy B. Killen MD

Salt Lake City, Utah USA

Briefly describe your background and journey into the field of biohacking:

I am a medical doctor (formerly an ER doctor) who became interested in biohacking in 2016 after treating a number of prominent biohackers with stem cell therapies.

How would you define biohacking in your own words?

Biohacking is enhancing your biology to improve health span by combing strategic lifestyle changes, supplements, and technology.

What are the biggest challenges you have faced as a woman in the field of biohacking?

Many of the leaders in Biohacking are men, but I don't feel like I'm at a disadvantage. As a physician who studies human optimization and longevity, I feel lucky to get to play in the Biohacking world (where do-it-yourself wellness is the norm) but also work in a clinical environment that is more controlled. It's the best of both worlds.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

My most notable breakthrough came when I accepted that, although I really like a lot of what biohacking stands for, I don't have to "do it all" to be really healthy and happy. In fact, sometimes doing less is actually better. I like to call myself a "Bioslacker" because I'm well-versed on Biohacking, but make conscious choices to only implement the things that I think matter most. In some ways, I think the Biohacking movement has swung a little too far - it asks us to stress

over every single thing we eat, everything we do, everything we think and to me, that's missing the point completely. Instead of being fearful of the world around us, what if we just became more resilient?

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

I enjoy the work of many female biohackers, including Mollie Eastman (Kristin Weitzel (warriorwomanmode), Renee Belz and Lauren Samataro (Biohacking Babes), and Kate Moore (thebiohacker). It's fun to see strong, smart women out there talking about biohacking and health in fresh ways.

How do you approach the ethical implications of biohacking and its impact on individuals and society?

As a physician, one of my biggest concerns about Biohacking is that many of the practices/supplements/therapies are unproven and potentially problematic. I love the idea of self experimentation, but I think some things are best done under the guidance of a doctor. For example, many people in the Biohacking world are experimenting with injecting peptides on their own, which I don't think is a great idea as these peptides come from unregulated vendors (not pharmacies) with potential serious side effects.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

I'm a big fan of getting outside daily for time in nature, cold plunges, and red light therapy. My favorite "hack" is going for a walk in the mountains. I turn off my phone and just wander the trails near my home talking to myself (and warding off mountain lions!). I realize that it's not really a "hack" but it's the best thing I've found for reducing stress and turning on creativity.

Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

Check out the Quantified Collective (www.quantified-collective.org) and Reputable (www.reputable.health). We're building a community of like-minded health and wellness entrepreneurs, experts and biohackers who want to do a better job of discovering what works and what doesn't work using decentralized science and data sharing. I have a longevity-focused nutritional supplement company called Human Optimization Project (HOP) that takes the guesswork out of starting a daily longevity supplement routine. Whether you're completely new to biohacking/longevity or you've been here awhile, we'd love to add a bit of ease and levity to your day!

www.hopbox.life.

[@dr.amykillen](https://twitter.com/dr.amykillen)



Mary Cristine

Dubai, UAE

Briefly describe your background and journey into the field of biohacking:

Mary began her professional journey with a deep-rooted passion for nutrition and gut health. Armed with a, certifications, she has established herself as an authority in the field, guiding individuals towards improved health through dietary interventions. However, Mary soon realized that conventional approaches alone could only take their clients so far.

Motivated by a relentless pursuit of holistic well-being, Mary embarked on a quest to explore unconventional avenues for promoting health. Intrigued by the emerging field of biohacking, they delved into scientific research, connected with experts, and embraced the ethos of self-experimentation.

Mary's journey into biohacking started with a focus on understanding the intricate connection between the gut and overall health. Drawing upon their nutrition expertise, they explored cutting-edge techniques to optimize gut microbiota, such as personalized dietary protocols, targeted supplementation, and innovative approaches.

How would you define biohacking in your own words?

Biohacking is a captivating voyage into the uncharted territories of human biology, where science and self-experimentation converge to unlock the hidden potential within us. It is an audacious endeavor that challenges the status quo, empowering individuals to rewrite the rules of their own biology and push the boundaries of human performance and well-being.

What are the biggest challenges you have faced as a woman in the field of biohacking?

As a woman in the field of biohacking, I have encountered several challenges that are reflective of the broader gender disparities and biases prevalent in STEM-related fields. Addressing these challenges requires concerted efforts from both individuals and the broader biohacking community. Recognizing and celebrating the contributions of women biohackers can help challenge stereotypes and biases, inspiring future generations of women to pursue their passions in this exciting field.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

One of the most remarkable breakthroughs I achieved was in developing a personalized biohacking protocol for a client struggling with chronic fatigue syndrome (CFS). I implemented a comprehensive and personalized approach. I utilized cutting-edge diagnostic tools to assess their gut microbiome, analyzed their genetic data, and monitored key physiological markers to gain insights into their unique challenges.

I tailored a protocol that included specific dietary modifications, targeted supplementation, optimized sleep hygiene, stress management techniques, and carefully selected biohacking interventions. The results were astounding. Not only did their energy levels steadily improve, but they also experienced a reduction in pain, improved mental clarity, and an overall enhancement in their well-being. Witnessing this transformation was a testament to the power of personalized biohacking interventions and their potential to bring about significant positive changes in individuals' lives.

Who or what inspired you to pursue biohacking?

Dave Asprey, the father of biohacking

TOP BIOHACKING WOMEN INSIGHTS

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

Morning Routine: I kickstart my day with a series of biohacking practices that set a positive tone for the rest of the day. This includes practicing mindfulness or meditation to promote mental clarity and focus, engaging in light stretching or yoga to improve flexibility and mobility.

Cold Exposure: Cold exposure, such as cold showers or ice baths, is a powerful biohacking technique that I regularly incorporate. Cold exposure helps improve circulation, boost the immune system, and enhance mental resilience. It can also promote fat loss and improve sleep quality.

Nutrient-Dense Diet: I emphasize a nutrient-dense diet that includes whole foods, plenty of vegetables, high-quality proteins, healthy fats, and limited processed foods.

Sleep Optimization: I maintain a consistent sleep schedule, create a sleep-friendly environment, and practice relaxation techniques before bed. I also use sleep tracking devices to monitor my sleep patterns and make adjustments accordingly.

Mindfulness and Stress Management: I incorporate mindfulness practices, such as deep breathing exercises, meditation, or gratitude journaling, to manage stress and promote mental well-being. These practices help reduce anxiety, improve focus, and enhance resilience in the face of challenges.

Physical Activity and Movement: Regular exercise is an essential part of my biohacking routine. I engage in a combination of cardiovascular exercise, strength training, and flexibility exercises. I also integrate movement throughout the day by incorporating short walks, standing or walking meetings.

Are there any specific biohacks that have made a significant difference in your overall well-being?

Intermittent Fasting: Implementing intermittent fasting, where I restrict my eating window to a specific time frame each day, has been

transformative for me. This approach has improved my metabolic flexibility, increased my energy levels, and helped regulate my appetite. It has also provided mental clarity and promoted better digestion.

Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

Podcasts:

"Be that life podcast" by Mary Cristine "Biohacking Secrets" by Anthony DiClementi. "The Quantified Body" by Damien Blenkinsopp. "Found My Fitness" by Dr. Rhonda Patrick.

[@marycristine](https://www.instagram.com/marycristine)



Rian Overcash

Austin, Texas USA

Briefly describe your background and journey into the field of biohacking:

Rian's passion for personalized-wellness transpired after her own decade long struggle with complex autoimmune issues. After seeing close to 40 providers across the country she was able to resolve her health concerns using genomic testing.

How would you define biohacking in your own words?

Biohacking is the practice of optimizing one's physical and mental well-being through the strategic application of biologically aligned practices, including lifestyle modifications, genetic compatibility, and cutting-edge technologies.

What initially attracted you to the concept of biohacking?

Biohacking= bioindividuality. Nothing is more bioindividualized than your DNA. At Habit Method Health, we embrace biohacking principles by utilizing genetic data and epigenetic modifications to empower individuals in making informed choices for their health. By understanding the unique genetic makeup of our clients, we provide personalized recommendations and root cause solutions that expedite wellness, enabling them to unlock their full potential and achieve optimal health. Through our biohacking approach, we help individuals navigate the complexities of their biology and harness the power of scientific advancements to enhance their overall well-being

What are the biggest challenges you have faced as a woman in the field of biohacking?

Lack of research around the benefits of biohacking for women. Historically, the majority of studies and research within biohacking have predominantly focused on men. Consequently, valuable data points into specific disease risks and health optimizations for women have been largely overlooked. Unlearning the "one size fits all" approach is required to succeed in optimizing health.

By leveraging the insights provided by genetic data and environmental education, we understand that what works for one person may not yield the same results for another. In doing so, we shatter the constraints of generic approaches and usher in a new era of biohacking that is defined by its effectiveness and precision.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

A notable achievement in my biohacking journey is the successful resolution of my decade-long struggle with multiple chronic autoimmune conditions. Despite consulting with 37 healthcare providers across the country, finding a sustainable solution seemed impossible until I delved into personalized biohacking. At this point, the term "biohacking" hadn't been coined yet but the concept of do-it-yourself biology was highly influential.

By embracing nutrigenomic insights and adopting a tailored approach to my health, I experienced a breakthrough that transformed my health. This life-changing experience fuels my passion for empowering others with personalized strategies at Habit Method Health, helping them discover their own paths to lasting wellness.

Who or what inspired you to pursue biohacking?

I was less inspired and more driven by desperation to pursue biohacking. Traditional medical approaches had failed me, and I found myself seeking alternative solutions to improve my health and well-being. This sense of urgency led me to explore biohacking as a way to take

control of my own health, experimenting with different techniques and practices to find what works best for my body. Through this journey, I discovered a newfound empowerment and remission from chronic illness.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

Utilizing my nutrigenomic data: Having access to my genetic information enables me to consistently prioritize genetically compatible foods, taking the guesswork out of mealtime and optimizing my nutrition.

Syncing my circadian rhythm: Aligning my daily activities with my body's natural circadian rhythm is crucial for my overall well-being and productivity.

Continuous glucose monitoring: Implementing a continuous glucose monitor has been a game-changer for me. It has significantly improved my metabolic flexibility and allowed me to better understand how my body responds to different foods and activities.

What advice would you give to women who are interested in exploring biohacking or entering the field?

To women interested in exploring biohacking or entering the field, my advice would be to start by building healthy habits. Take it step by step, focusing on one habit at a time to create a strong foundation for your biohacking journey. It's easy to get caught up in the allure of fancy devices and supplements, but remember that the basics of health are crucial. Give yourself the grace to be human.

Begin by cleaning up your environment and removing toxic products. Spend time in the sunshine and make movement a part of your daily routine. Don't overlook the importance of minerals in your diet, and prioritize eating whole foods that nourish your body. Lastly, never underestimate the power of quality sleep for overall well-being.

Where do you see the field of biohacking heading in the next five to ten years?

Coming from the field of nutritional genetics, I'm truly excited to witness the future developments in ancestral eating and regenerative farming practices. Our recent peptide program has been a game-changer. The use of genetic information to guide peptide protocols has yielded incredible results, and I am amazed by the positive impact it has had on people's lives. It's inspiring to witness the power of personalized approaches to health and wellness. The future of biohacking and personalized health is filled with promise, and I am eager to continue exploring and contributing to this exciting and evolving field. There is so much potential to unlock, and I can't wait to be a part of it!



[@habitemethodhealth](https://www.instagram.com/habitemethodhealth)

Melina Gioia Vicario

Buenos Aires, Argentina

Briefly describe your background and journey into the field of biohacking:

I am a Licensed Master en Trainer in Mind Technology. I studied Neuroscience at Stanford University. I went to take a seminar with Dave Asprey and learned from him. I started sharing all this information in Spanish, and giving seminars and talks combining Biohacking, Neuroscience and Mind Technology. Then I wrote the first ever Biohacking book in Spanish, "Biohacker", published by Editorial Planeta, currently a long run best seller and on its 3rd edition already. I became "The Voice of Biohacking in Spanish", sharing all this information to the Hispanic community.

How would you define biohacking in your own words?

A user manual for humans in these times. A user manual for the biology in the unnatural context of the city, and a user manual for our brain. Now we can learn how to Think on Purpose.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

The most important one, I think, is related to Thinking on Purpose, so I can program my own mind and live in more freedom.

I used to be a very very shy, fearful and scared lady until my late 30s! Then I learned something very powerful;

If you change what you think, it changes what you feel, and it changes what you can do. So I learned how to program my own mental world, and I became a courageous person, more powerful and relentless, to pursue my life purpose to do as much goodness as possible to the world

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

Nathalie Niddam. She taught me a lot about Biohacking, she mentored me with great generosity and wisdom.

What safeguards or principles do you follow to ensure responsible and ethical biohacking practices?

- To have a life purpose that is bigger than myself: that does goodness to as many people as possible.
- To have mother nature and love as guides
- To be aware of the things I dont know, and be able to ask

Are there any specific biohacks that have made a significant difference in your overall well-being?

Being able to recognize the chemical harmful cosmetics I was using and remove them from my life. Learning the user manual of the brain and knowing of to expand my mental world, and how to program hope, joy and enthusiasm in myself.

Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

For the Spanish speaking people specifically: there is a Facebook Group called "Tribu Biohacker- Biohacking en español". Its a great group, so I recommend everyone to check it up and join if you want to connect with fellow biohackers from the Spanish Speaking world.



[@labiohacker](#)

Melanie Avalon

Atlanta, Georgia, USA

Briefly describe your background and journey into the field of biohacking:

When I was faced with health challenges upon graduating (mold exposure, chronic fatigue, hypothyroidism, anemia, mercury toxicity, etc.), I immersed myself in a relentless search for lifestyle practices, supplements, and tools, to regain my eclipsed energy. I am now forever grateful for the health challenges which haunted me. They inspired me to take true agency with my health. I adore producing "The Intermittent Fasting Podcast," and "The Melanie Avalon Biohacking Podcast," which are top .1% and top .5% podcasts, respectively, with millions of downloads. I treasure the beautiful community of listeners who forever share their journeys with me, and their support. I hope I may always promote the mantras I hold for myself: Breathe. Be Kind. You got this!

How would you define biohacking in your own words?

While people debate the definition of "biohacking," I see it as the use of technology, supplements, and lifestyle practices to optimize one's physical and mental performance, and support longevity. Ironically, this often involves utilizing modern technology to return our bodies to states more akin to that of the pre-modern era, such as combating today's chronic stressors, and upregulating protective health and longevity pathways originally activated by the extreme environments of hunter gatherers. Biohacking as a whole provides profound benefits in supporting health and vitality, reducing stress, and increasing not just lifespan (the number of years) but healthspan (the quality of those years), so people may mitigate modern stress and best pursue their passions.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

I experienced a major personal breakthrough in a paradigm shift when I stopped viewing my biohacking experiments and tracking as necessities for health and vitality, and rather as tools to optimize my life's journey. I think far too often we can get obsessed with biohacking, fueling our journey with a fear-based need to constantly do #allthethings, or we have failed. I felt so much more free, once I realized biohacking can be simply enlightening and empowering, rather than required, for life.

Who or what inspired you to pursue biohacking?

While I started wondering in a myriad of fringe biohacking internet forums over a decade ago, Dave Asprey was the first figure who crystalized the definition in my mind, and continually inspired me with his podcasts and books. It's surreal to now have had him on my podcasts multiple times, and also call him a friend. I am forever grateful!

How do you approach the ethical implications of biohacking and its impact on individuals and society?

While biohacking is not inherently dangerous, anything can be taken too far, so people should use caution in not overdoing it. New technology may be untested, still being studied, and/or expensive (such as stem cell therapy), while some more progressive forms of biohacking can be invasive, such as implants.

I am concerned with biohacking companies taken advantage of people with expensive, unverified technology. For these products, I extensively research their published literature and findings, and have personal calls with the founders to vet their stories and intentions.

While biohacking in and of itself is not illegal, unless someone is experimenting with illegal substances, such as psychedelics in non-legal setting, there are still potential legal societal issues. For example, the common biohacking supplement NMN (a precursor to NAD generation in the body) is currently under investigation

by the FDA, and is being banned for use as a dietary supplement. The FDA has also issued warnings about other-wise legal biohacking practices in illegal contexts, such as some stem cell treatments.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

I am obsessed with my Oura Ring. I've interviewed the former CEO Harpreet Rai on my show twice, and am extremely impressed with the technology.

I also love wearing continuous glucose monitors (CGMS), which last for 2 weeks, and continuously track blood sugar levels via interstitial fluid..

Cold therapy is a must for me, and I do cryotherapy session almost every day without fail, to reduce inflammation and upregulate neurotransmitters such as dopamine and epinephrine.

At nights, I always have an infrared sauna to reduce muscle soreness, detox via sweat, boost the immune system via the stimulation of an artificial fever, and activate longevity-promoting heat shock proteins.

I light up my life with red and NIR-infrared light therapy to support the mitochondria, enhance skin, and reduce muscle soreness.

And of course, I wear blue light blocking glasses at night, to support a health circadian rhythm. (Especially since this girl is a night owl!)

I also drink deuterium-depleted water.

What advice would you give to women who are interested in exploring biohacking or entering the field?

I recommend starting with biohacks like supporting sleep and/or metabolic health. You can start with easy, approachable avenues like adjusting your sleep environment, or taking cold

showers. Saunas are also extremely relaxing, and an easy gateway into the biohacking world.

Getting a wearable like an Oura Ring can be key to provide real-time feedback, as well as continued motivation on the journey.

Where do you see the field of biohacking heading in the next five to ten years?

I see biohacking becoming increasingly nuanced and granular with wearables for tracking biometrics (heart rate variability, exercise, blood respiration, blood sugar, etc.), with increasing AI data analysis to help people truly make changes to impact these biomarkers for the better. I think biohacking modalities such as cryotherapy and red light therapy will become increasingly more approachable, both logistically and financially. I think there increasingly more biohacks for the mind. My main concern, in all of this, is EMF exposure and privacy issues.



[@melanieavalon](https://www.instagram.com/melanieavalon)

Orshi McNaughton

Orange County, California, USA

Briefly describe your background and journey into the field of biohacking:

My journey into health optimization started with a career as a fitness entrepreneur, managing multiple fitness facilities in Southern California, running body transformation challenges for 10+ years. As I approached my 40s, I faced personal health challenges, including mold and heavy metal toxicity, chronic fatigue, hormonal imbalances, and gut issues. This compelled me to delve into the world of biohacking, where I explored nutrition, mindfulness practices, sleep optimization, cutting-edge technologies, and supplements. Now, as the founder of Precision Cellular Nutrition, I am dedicated to helping women restore metabolic health, balance hormones, and address gut issues, empowering them to embrace their most powerful selves and thrive in every aspect of their lives.

What are the biggest challenges you have faced as a woman in the field of biohacking?

In a historically male-dominated field like biohacking, the influence of prominent male figures on podcasts, interviews, and stages across the US has been undeniable. Unfortunately, this lack of representation for women has been mirrored in medical research, where studies have predominantly focused on men for many years. It's astonishing to think that the National Institutes of Health (NIH) only recently mandated the inclusion of women in clinical studies. Consequently, the biohacking space, like traditional medicine, began with a primary focus on men's health.

Many biohacking practices and technologies are designed with a one-size-fits-all approach, which may not always take into account the unique hormonal and physiological differences that wom-

en experience. It has been essential for me to advocate for gender-specific considerations in biohacking practices and research to ensure that women can fully benefit from these cutting-edge strategies.

However, the landscape is rapidly evolving, and there is a clear shift towards inclusivity and recognition of women's unique health needs in the biohacking community. As more women like me become vocal advocates for gender-specific considerations, we are challenging the status quo and driving change.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

One of the most notable achievements was overcoming my own health struggles, particularly the discovery of mold and heavy metal toxicities as significant contributors to my health challenges. In my mid 30s, I underwent a major dental makeover, having all my amalgam fillings removed simultaneously. Soon after, I began experiencing migraines and was diagnosed with Hashimoto's Thyroiditis, food sensitivities, and a rapid decline in overall health followed. This initiated a ten-year journey of exploring cellular health, detoxification, and nutrition, as I sought anything and everything to regain my vitality and energy as a high performer, former entrepreneur, and figure competitor. The memory of my past well-being served as both motivation and reminder throughout the arduous process of restoring my health. This journey has been pivotal in shaping my passion for precision cellular nutrition and empowering other women to optimize their well-being.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

I have sought female mentors and role models in the field, but unfortunately, there were limited prominent female figures to look up to. This inspired me to take matters into my own hands and create the Women's Biohacking Conference in 2022. Through this platform, I had the opportunity to interview and learn from influential

women in the biohacking space, making their knowledge accessible to women worldwide. We are now in our second year of the Women's Biohacking Conference, a virtual, free event going live again this coming September 2023.

One notable female influencer in the field who greatly inspired me was my co-host, Katie Moore. Her YouTube channel offered high-quality content with unwavering integrity and authenticity. At the time, it was rare to find a young, articulate female in the biohacking space who shared cutting-edge and intriguing content without any personal agenda.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

Firstly, optimizing my circadian rhythm and prioritizing quality sleep have had a profound impact on my overall well-being. I follow a solid morning routine that involves exposure to morning sunlight, exercise, and practicing meditation. Staying active during the day, getting a minimum of 8 to 10K steps per day keeps me accountable for not becoming sedentary while being in front of screens all day. My yoga practice is another fundamental aspect of my weekly routine that does wonders for my mental health, overall flexibility and balance.

I have discovered that specific supplement stacks to support my body's detox pathways and optimize mitochondrial function have been truly transformative for my health. My evening routine is carefully crafted, and I make sure not to eat at least three hours before bedtime. I usually start my evening routine with a beach walk at sunset most nights, minimizing blue light exposure after sunset, and going to bed at the same time each night. My 8 sleep bed with its automatically adjusting cool temperature throughout the night has been a game changer for my sleep. Creating a completely pitch-dark sleeping environment is non-negotiable for me. These practices have had a significant impact on my overall well-being and energy levels.

Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

The Women's Biohacking Conference was

founded with a mission to provide a resource for women interested in biohacking and health optimization. This free platform offers a unique perspective, focusing on women's specific health needs and concerns. Through expert-led discussions and presentations, the conference empowers women to take charge of their health and unlock their true potential. Additionally, the complimentary Facebook group serves as a supportive community where female biohackers can connect, share experiences, and learn from one another. It's a space where women can delve deeper into the world of biohacking and find camaraderie in their health optimization journey.

Women's Biohacking Collective: <https://www.facebook.com/groups/womensbiohacking> Women's Biohacking Conference: <https://www.womensbiohackingconference.com/> Precision Cellular Nutrition: <https://www.precisioncellularnutrition.com/> Katie Moore's YouTube: https://www.youtube.com/@katie_moore



Orshi McNaughton

[@biohackerchick](https://www.instagram.com/biohackerchick)

Hannah Went

Lexington, KY, USA

Briefly describe your background and journey into the field of biohacking:

I've always had a lifelong passion for longevity and breakthrough, disruptive technologies that drive radical improvement to the human condition. In 2015, I attended the University of Kentucky and graduated with a degree in Biology. During that time, I had multiple research internships studying cell signaling and cell biology. After graduation, I worked for the International Peptide Society as their Director of Research and Content. Through work in the integrative medicine industry, I saw an opportunity for methylation based age diagnostics and started TruDiagnostics in 2020 which really started my journey into the field of biohacking.

TruDiagnostic is a company focusing on methylation array-based diagnostics for life extension and preventive healthcare serving functional medicine providers. TruDiagnostic has a commitment to research with over 30 approved clinical trials investigating the epigenetic methylation changes of longevity and health interventions. Since TruDiagnostic's inception, we've created one of the largest private epigenetic health databases in the world with over 30,000 patients tested to date.

Since then, I've created Everything Epigenetics where I shares insights on how DNA regulation has an impact on your health. I also educate on how epigenetic biological age testing is a great biohacking tool to use as a baseline for the #1 risk factor for most chronic disease and death, aging.

What are the biggest challenges you have faced as a woman in the field of biohacking?

As a woman, the biggest challenges that I've faced in the field of biohacking is the lack of data in clinical interventional trials. Historically, there has been a significant lack of representation of women in clinical trials, particularly in medical and pharmaceutical research. This gender disparity in clinical trials has raised concerns about the validity and applicability of research findings to both men and women. This lack of research in woman makes it difficult to safely test interventions or treatment protocol plans.

However, it's important to note that there has been increased awareness and efforts to address this issue in recent years (this magazine being one and women in biohacking being another!), but achieving equal representation of women in clinical trials and ensuring gender-specific analysis remains an ongoing challenge.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

My favorite biohacking practices include a high protein breakfast and 24-hour fast. A high-protein breakfast has been shown to help with satiety and appetite control, muscle maintenance and growth, and blood sugar regulation. It also acts as a metabolic boost and helps reduce cravings! As for the 24-hour fast, I perform this once a week from Thursday at 5PM to Friday at 5PM. Fast have been shown to assist with autophagy, insulin sensitivity, weight loss and fat burning, cellular repair, and brain health.

Where do you see the field of biohacking heading in the next five to ten years?

In the next five to ten years, the field of biohacking is likely to undergo significant developments and shifts. Biohacking may transition from a niche pursuit to a more mainstream phenomenon, as growing numbers of individuals seek to optimize their health and performance. This evolution could be driven by advancements in personalized health technologies, such as wearable devices and epigenetic biological age testing, enabling biohackers to access tailored insights about their bodies.

Cognitive enhancement could also gain traction, with increased interest in nootropics and innovative techniques to boost cognitive function. Additionally, the biohacking landscape might witness a surge in DIY biology projects and experimentation as biotechnology tools become more accessible. Nutrigenomics and microbiome manipulation could become more prevalent, leading to personalized dietary recommendations and interventions targeting gut health.

[@everythingepigenetics](#)



Julia Smila

Miami, FL USA

Briefly describe your background and journey into the field of biohacking:

I am a Biohacker, a certified Functional Diagnostic Nutrition Practitioner, and a Pranic Healer.

I am passionate about exploring various ancient techniques for upgrading our minds. One such technique that I have been practicing for over 10 years is Transcendental Meditation, which I have personally experienced as life-changing.

As an FDN-P, my purpose is to teach people how to manage their own health and wellness, thereby preventing diseases through stress reduction. I aim to help individuals assess, feel, and understand their own bodies.

I have been co-founder at BiohackingCongress for 4 years. Now am the founder of UltimateWellness, a platform dedicated to promoting a holistic approach to our health: the spirit - emotional - mind - body connection. It brings together a community of top health and longevity experts, inventors and founders of advanced Longevity and Biohacking technologies.

How would you define biohacking in your own words?

Our health and wellness are measurable and manageable projects, and it is our responsibility. This mindset is embraced by biohackers. Biohacking or Ultimate Wellness represents a holistic approach to our health and wellness, emphasizing the connection between the spirit, emotions, mind, and body. To optimize our health, it is important to follow a holistic wellness protocol on a daily basis. This protocol includes pillars such as diet, rest, exercise, stress reduction, supplementation, and etheric hygiene. It should combine innovative technologies with ancient practices.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

I've emigrated to the US from Ukraine and obtained the Green Card for extraordinary achievements in the Wellness, BioTech and HealthTech industries.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

Agustina Caminos, Wellness Director at Faena Group. I got the insight that in the Ultimate Wellness I put Spirit first.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

- Diet according my Metabolic Type, excluding meals which was tested positive on my MRT Food Sensitivities.
- Supplementation - long list of essential vitamins and trace elements, including injections with NAD+ and Peptides.
- Non Toxic, Non chemicals environment - we can not empty the bath if toxic water is running
- Healthy night sleep, sun light exposure right after wakeup, Mozart music before checking email/chats, mindfulness breaks during the day.
- Grounding: walking barefoot, swimming in the ocean, AntiAging bed +EMF protection.
- Holotropic Breathing, Pranayama, and different techniques with TheBreathSource App
- TM Meditation, TwinHearts Meditation, + BrainTap and NuCalm
- Pranic Healing

What advice would you give to women who are interested in exploring biohacking or entering the field?

Start with lab tests:

- 1) Stress and Hormonal Panel,
- 2) Metabolic Wellness Profile
- 3) Mucosal Barrier Assessment
- 4) Gastro Intestinal Map

Exclude all possible stressors - Mental, Emotional, Chemical, Biochemical, Biomechanical



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Anna Lindfors

Helsinki, Finland

Briefly describe your background and journey into the field of biohacking:

In many ways, my personal journey into biohacking is a “wounded healer” story, which is common among biohackers. I was always into health and fitness, being an athlete my entire life. But falling ill and losing my health to the point of nearly dying got me into biohacking. Combining my personal journey with my professional training in Psychology and Sexology has allowed me to help others heal.

How would you define biohacking in your own words?

Biohacking is about learning to understand your body, mind and soul - and then enhancing each dimension via connection (e.g., with yourself, nature and loved ones) and technological innovations according to your needs.

What are the biggest challenges you have faced as a woman in the field of biohacking?

The biohacking field is very masculine, and most biohacks are optimized for male hormones/physiology e.g., intermittent fasting. I used to “biohack like a man” and it wasn’t optimal for my body. I thrive through embodied biohacking like intuitive eating, and biohacking according to different phases of my menstrual cycle.

Could you share a notable achievement or breakthrough you’ve experienced in your biohacking journey?

One of my biggest achievements with biohacking is getting endometriosis into remission and biohacking myself to the best health of my life

from nearly losing my life. It’s been a journey filled with challenges and pain, which has taught me to appreciate the delicate and yet resilient beauty of life.

Who or what inspired you to pursue biohacking?

Originally I ended up biohacking through my dear friend Inka Land. We were both studying Psychology in Scotland, and connected over our shared interest in optimizing health. She introduced the concept of biohacking to me and I realized that it was exactly what I had been looking for.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

I feel that female biohackers form a beautiful and community. We all support and mentor each other. For example, Susan Bratton is a dear friend of mine and a true force of nature in the sex space. I’ve learned so much from her about business & pleasure. Melina Gioia Vicario is sunshine in human form. Her presence, passion and caring inspires all of us. Dr. Alisa Vitti and Dr. Jolene Brighten have taught us women so much about optimizing our hormonal cycles and letting go of birth control. My dear friend Dr. Sandra Porthan helps women balance hormones and connect with their femininity in a gentle and loving way, she is an inspiration to us all.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

Embodied biohacking and cycle-based living. In other words, understanding how my body & mind change from menstruation, follicular phase, ovulation and luteal phase, and adjusting exercise, nutrition & supplements, work, sleep, and intimacy based on my needs each phase. I love doing sensual dance as a way to cultivate sensual and feminine energy (I created a playlist



for this, you can find it on my instagram).

In addition, all the basics need to be in place like grounding, sunlight/red light therapy, meditation and journaling for mental wellbeing (I like to use NeuroVIZR), blue light blockers for sleep (I use FilterOptix).

Are there any specific biohacks that have made a significant difference in your overall well-being?

This might be a bit out of the box, but I would recommend getting a health coach, if possible, to guide you in your biohacking journey. My health coach Justin Maguire has helped me elevate my biohacking journey to a new level. Having support on your journey simply makes it easier, effective and holistic - and you avoid lots of mistakes that most people make when they start biohacking.

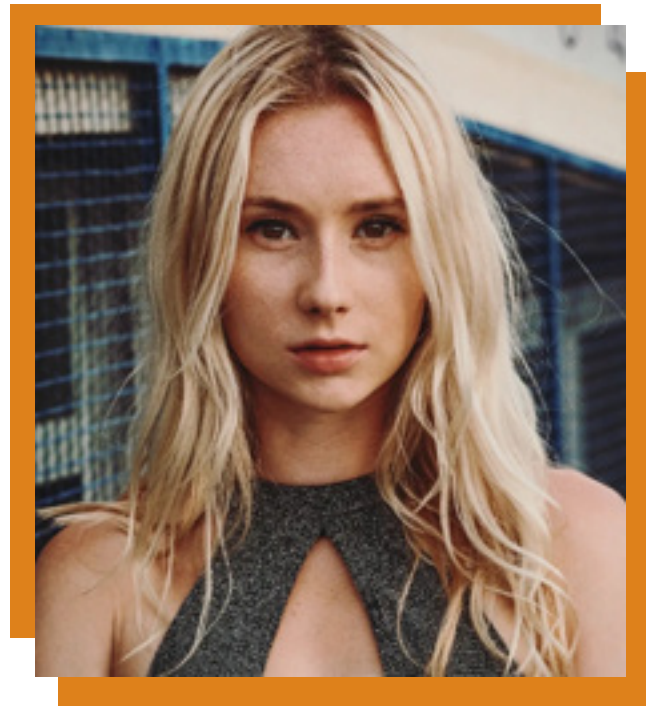
[@healwithanna](https://www.instagram.com/healwithanna)

What advice would you give to women who are interested in exploring biohacking or entering the field?

Learn to understand your menstrual cycle and hormones, and biohack accordingly. Our hormonal cycle is our superpower when we harness the power of it. Remember that biohacking is not only about optimizing your biology, but an ever-growing journey of self-development, learning and connecting.

Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

"Beyond the pill" from Dr. Jolene Brighten, "In the Flo" from Alisa Vitti, and Biohacking Women online course from Inka Land & Sandra Porthan for starting the journey into female biohacking. I also created the Biohacking Love & Relationships online program with Biohacker Center to help biohackers improve one of the most important aspect of their lives: their relationships. I would recommend it to all biohackers to enhance the unspoken parts of our lives.



Megha Gupta

Goa, India

Briefly describe your background and journey into the field of biohacking:

Getting diagnosed with Type 1 diabetes a few years ago led to an eye-opening path of health wellness and Biohacking. It has helped me manage type one and helped me help others lead their life in the best possible way.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

I'm inspired by the beautiful set of women we have in our community, each bringing a unique approach to this healing modality.

What safeguards or principles do you follow to ensure responsible and ethical biohacking practices?

One - I keep myself deeply informed about all that's new in the world of Biohacking, so that I am able to responsibly help my tribe.

Two - I try everything, I experience everything before I spread the health so that I know the pros and cons of it all.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

Some non-negotiable protocols for me are the blue light blockers, sauna, ice baths each morning and red light therapy.

Who or what inspired you to pursue biohacking?

Originally I ended up biohacking through my dear friend Inka Land. We were both studying Psychology in Scotland, and connected over our shared interest in optimizing health. She introduced the concept of biohacking to me and I realized that It was exactly what I had been looking for.

Are there any specific biohacks that have made a significant difference in your overall well-being?

Blue light blockers after 6 pm and cold plugging each morning.

What advice would you give to women who are interested in exploring biohacking or entering the field?

Do it.

Don't wait to know everything. Start now.

Start small.

Every little step is a big one.

Be informed. Knowledge is your ammunition.

Where do you see the field of biohacking heading in the next five to ten years?

Only upwards. As more and more people are understanding that health is truly wealth, we are in an era of abundance in every way.

Is there anything else you would like to share or discuss that hasn't been covered in the previous questions?

Don't listen to people in power. They may not always have your best interest. People get paid to sell stuff they wouldn't use themselves.



[@meghaguptaofficial](https://www.instagram.com/meghaguptaofficial)

Colette Schnabel

Fort Lauderdale, Florida, USA

Briefly describe your background and journey into the field of biohacking:

Over a decade, I lived a life many dream of, chasing endless summers aboard luxurious mega yachts. This 'work hard, play harder' lifestyle, however, came at a cost. Long hours and relentless stress took a toll on my body, leaving me perpetually exhausted. Everything changed when I became pregnant. This pivotal moment sparked a profound curiosity about our food supply and healthcare systems, leading me down a path of discovery and advocacy, particularly concerning the effects of glyphosate. Becoming a mother was transformative, but it also brought its own challenges. I battled chronic pain and crippling anxiety that felt overwhelming, making it difficult to express the turmoil inside me. I realized I couldn't be the mother I wanted to be while grappling with these issues. It was then that a mentor introduced me to the concept of how childhood traumas can manifest later in life. She enlightened me about frequencies and technologies that communicate with our energy, offering a pathway to healing and balance. I dove headfirst into the world of frequency therapies and modalities, fascinated by the potential for self-healing and mastery. Discovering biohacking was a revelation. I found myself part of a community equally passionate about harnessing cutting-edge technologies for health and longevity. As I grow and educate myself, witnessing the community's expansion and the emergence of new technologies, I'm filled with hope and excitement for the future of human health.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

My most remarkable breakthrough in biohacking, which may sound a bit repetitive but is profoundly significant, is the quantum leaps I've made in my mental health, self-worth, self-love, and confidence. The introduction of frequency therapies into my life marked the beginning of this transformation. Initially skeptical about energy and its workings, I was nevertheless drawn to the potential it held for personal growth. Despite harboring a storm of negative self-worth and limiting beliefs, I intuitively felt that embracing these therapies could be the key to unlocking the greatness I always aspired to. This journey began with a simple yet powerful act, prompted by my mentor who emphasized the importance of manifesting desires through writing. Though initially skeptical, something clicked, and I decided to write down my aspirations. I boldly declared on paper that I would become a top influential leader in my field and speak on stages to change people's lives. At that time, the mere thought of being in large groups triggered my anxiety. But trusting this newfound path, I persisted, delving deeper into various frequency modalities to push past each new milestone. The transformation was tangible. I found myself showing up in ways I never had before, witnessing a veil being lifted, revealing a new, confident version of myself. This journey has taught me the power of intention and manifestation. Now, I diligently write down my goals and aspirations, tuning into the frequency of the life I am creating each morning. It's a practice that has not only shaped my career but fundamentally changed who I am as a person.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

Dr. Michelle Patrick and Dr. Lauren Leiva are two women in biohacking who have profoundly influenced my journey. Dr. Patrick, with her extensive knowledge of ancient Chinese med-



icine and modern technologies like frequency medicine, has reshaped my understanding of biohacking. Her educational approach blends deep wisdom with innovative practices, offering a transformative perspective on health and self-mastery. Dr. Leiva's story and approach, particularly as a mother and intuitive healer, resonate strongly with me. Her work, especially through her center, exemplifies the power of intuition and the body's healing abilities.

What safeguards or principles do you follow to ensure responsible and ethical biohacking practices?

To ensure ethical biohacking practices, I follow key principles: informed consent and transparency, continual education and adaptability, prioritizing safety, engaging with the biohacking community for peer review, respecting individual needs with tailored solutions, and advocating for accessibility and equity in the field.

Are there any specific biohacks that have made a significant difference in your overall well-being?

Microcurrent frequencies and meditation have been pivotal in improving my overall well-being. Microcurrent frequencies have enhanced my physical health and vitality by balancing my body's natural rhythms. Meditation, on the other hand, has greatly benefited my mental health. It has helped reduce stress, improve focus, and has been crucial in manifestation, enabling me to connect deeply with my inner self.

[@colette.biohackingmama](https://www.instagram.com/colette.biohackingmama)

Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

For anyone keen to delve deeper into biohacking, especially in the area of frequency medicine, I highly recommend 'The Resonance Effect' by Dr. Carolyn McMakin. This book is an invaluable resource for both beginners and seasoned practitioners. Dr. McMakin has a unique ability to demystify how frequencies interact with our bodies, making the concept accessible and understandable. 'The Resonance Effect' is more than just a book; it's a tool that empowers readers to explore and apply the principles of frequency medicine in a tangible way. Whether you're just starting out or looking to deepen your understanding, this book is a must-read for anyone interested in the science and practice of biohacking through frequencies.



Challenge Yourself

Put Your Lifespanning Knowledge to the Test

1 What natural compound found in certain supplements is linked to the activation of sirtuins, potentially promoting longevity?

- a) Melatonin
- b) Resveratrol
- c) Coenzyme Q10
- d) Turmeric

3 Which compounds are often included in supplements to boost cellular levels of NAD+, a molecule associated with longevity?

- a) Omega-3 fatty acids
- b) Antioxidants
- c) Nicotinamide Riboside (NR) and Nicotinamide Mononucleotide (NMN)
- d) Vitamin C and E

5 What is the primary purpose of senolytics in the context of longevity research?

- a) Enhancing muscle growth
- b) Eliminating senescent cells
- c) Boosting immune system function
- d) Regulating mitochondrial activity

2

Which scientific breakthrough is associated with the potential extension of telomeres, contributing to cellular longevity?

- a) CRISPR gene editing
- b) Nanotechnology
- c) Telomerase activation
- d) Quantum computing

4

Which supplements are often recommended for supporting mitochondrial health, a key factor in longevity?

- a) Iron and calcium
- b) Vitamin D and B12
- c) Coenzyme Q10 and PQQ (Pyrroloquinoline quinone)
- d) Zinc and magnesium

Answers:
biohackersmag.com/quiz

IN THE LAB

Some of the latest scientific research in the fields of lifespans and longevity



Tai Chi Triumph: 12 Weeks of Guided Practice Shows Remarkable Decrease in Frailty for Older Adults with Hypertension

In a groundbreaking study in San Diego, 12 weeks of twice-weekly Tai Chi practice, guided by instructors, demonstrated a significant decrease in frailty among older adults with hypertension. The study, which included 167 participants, revealed promising results, with Tai Chi showing superior outcomes compared to traditional Healthy Aging Practice-centered Education classes."

<https://pubmed.ncbi.nlm.nih.gov/37458963/>

Fasting Secrets Unveiled: Breakthrough Study Reveals Human Metabolic and Immune Benefits, Identifies Potential Longevity Elixirs

A disruptive pilot study exploring prolonged fasting in 20 young participants unveils transformative effects on metabolism and immunity. Identified bioactive metabolites, including spermidine and 1-methylnicotinamide, not only mimic fasting effects on human macrophages but also extend the lifespan of model organisms by up to 96%, opening doors to potential longevity elixirs.

<https://pubmed.ncbi.nlm.nih.gov/36811567/>



Revolutionizing Pain Management: Long-Term Collagen Peptide Intake Shows Remarkable Improvements in Middle-Aged Active Adults

A double-blind study reveals that daily consumption of collagen peptides (CP) over 6 to 9 months significantly enhances activities of daily living, reduces pain, and boosts mental and physical health in middle-aged active adults. This nutraceutical breakthrough offers a promising solution for chronic pain management

<https://pubmed.ncbi.nlm.nih.gov/37551682/>



Natahsa Wiscombe

Newport Beach, California, USA

Briefly describe your background and journey into the field of biohacking:

Raised just outside Washington D.C. in Silver Spring, MD, I was extremely lucky to be surrounded by a history rich with pioneers in their own right; like environmentalist Rachel Carson, who wrote 'Silent Spring' and Halbert Dunn, the "father of wellness" who conceptualized the original concept of wellness.

Growing up down the street from the FDA, dinner table conversations often revolved around corruption, bureaucracy as a bottleneck and the need for massive change in order for societal change to happen. This & many other experiences early on set the stage for my belief in a bottom-up approach to (human) flourishing was the key. I wound up writing my thesis on health and athlete optimization across lifestyle, movement, genetics & editable-variables well before the "biohacking" movement started 10 years later. It allowed me to help craft and expand the biohacking movement when I joined Bulletproof as a very early hire.

In my 20s, I faced my own health challenges with Lyme and mold toxicity, discovering firsthand the gaps in our medical system's ability to navigate complex illnesses. This experience led me to the predominately male quantified self movement, which helped but still needed some edges sanding.

For over 15 years, I've made consistent, intentional choices around my health. According to the latest DuendimPace test, my aging rate is a very nice 0.61, one of the slowest in the world. Coupled with two decades of weightlifting, I'm in the best shape I've ever been and a true testament to a blend of robust genetics, environment & smart lifestyle choices.

How would you define biohacking in your own words?

Echoing Soren Kierkegaard's wisdom that 'Life can only be understood backward, but it must be lived forwards,' biohacking is a journey of self-ownership. It involves strategically using both known and unknown elements, creating present-day systems that enhance health through insightful feedback loops but keeping in mind past research and experiments.

Who inspired you to pursue biohacking?

My mother, a remarkable woman, had me at 41 but effortlessly blended in with the other mothers in their twenties. Her youthful vitality definitely sparked my early realization of the profound link between intentional living, internal health, and its external manifestations. She was a firm believer in the influence of our surroundings on our health and vitality. Remarkably, she overcame advanced cancer using several unique paths, including living on an Ashram in India, where meditation, yoga & community were key components of her programming.

I owe a debt of gratitude to her for passing down her A+ awesome mitochondria. Most of my family is from a small mountain village in the Czech Republic, a world away from industrial pollutants and life's major stressors, undoubtedly contributing to some pretty solid epigenetics.

Are there any women in the field of biohacking who have served as your role models or mentors?

Yes. Karliin Brooks. She has a masterful grasp on the intersection of biology, chemistry and bio-

physics. She serves as my first-stepper beacon to treatments that have more often than not become a part of my YouTube series, The Wellness Traveler.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

1. Peptides. Right now, I'm on a muscle & mitochondria stack we utilize with Peptide Course clients. I am incredibly energized, mentally focused and feel great about my body composition heading into the holidays. The holidays can be quite stressful between family, shifting environments and less-than-perfect food choices around but with this peptide stack I'm level-headed, able to get in quality movement daily and making great choices for my long-term health.

2. Sunlight and water. Without fail. We are ALL better humans when I get sun on our skin & in/around a fresh or salty body of water. I spent a better part of last year kitesurfing in Brazil and while I made massive strides in fortifying my nervous system through athletics, I've been able to maintain that work utilizing simple practices like walking in sunlight and spending time in/around bodies of water.

3. Kaatsu is a biggie for me these days. I'll pop on the arms and/or leg bands and go for a walk most days. I'll utilize the bands for lifting 2+ times per week using lighter weights. And, just for fun and to clean up my endothelial tissue and arteries I've been pairing blood flow restriction with easy movement, low dose aspirin, fibrin dissolvers all while being in a 16+ hour fasted state.



Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

For someone interested in making better bioindividual choices utilizing their own data I suggest Reputable Health, Self Decode & Inside Tracker. For those interested in learning more about peptides, head to www.peptide.courses. I have quite a few websites. My best personal one could be... <https://atribecalledw.health/>



[@natashainca](https://www.instagram.com/natashainca)

Shira Lazar

Los Angeles, California, USA

Briefly describe your background and journey into the field of biohacking:

I've always been drawn to the latest in technology and health trends, making biohacking an inevitable area of interest for me. My professional journey has been marked by a deep curiosity about the forefront of innovation. Biohacking, in its seamless melding of advanced technology, health sciences, and the pursuit of personal betterment, quickly captured my attention.

It represents not just a field of study but a dynamic and evolving landscape where cutting-edge meets practical application. For me, biohacking is more than a topic; it's a fascinating lens through which we can view and influence our own health and capabilities, offering a rich vein of insights and discoveries that I'm eager to explore and share with my audience.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

My 'Joy of Missing Out' journal. This personal project represents a significant breakthrough in my approach to biohacking. While much of biohacking is focused on optimization and productivity, my journal emphasizes the importance of mindfulness, mental health, and the power of disconnecting. It's a testament to the idea that sometimes stepping back and embracing the joy of missing out is as crucial as any technological or nutritional hack. This journal has not only been a transformative tool for my own well-being but also serves as a reminder that biohacking can encompass a wide range of practices, including those that prioritize mental and emo-

tional health. You can find My 'Joy of Missing Out' journal @[peaceinside.live/jomo](https://www.peaceinside.live/jomo)

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

Taryn Southern, is a longtime friend who has deeply influenced me. Her courageous battle with stage 4 breast cancer and the insights she shares combine scientific rigor with holistic health. Her approach inspires my own, blending cutting-edge science with natural wellness, and has significantly shaped my perspective on health and longevity.

What safeguards or principles do you follow to ensure responsible and ethical biohacking practices?

In my role as a content creator, I feel a deep responsibility to ensure that what I share about biohacking is not only intriguing but also scientifically grounded. It's important to tread carefully, steering clear of promoting anything that's unverified or potentially harmful. This means doing my own research and encouraging other to do the same.

What advice would you give to women who are interested in exploring biohacking or entering the field?

Stay curious, trust your instincts and don't be scared of forging your own path. Also, your personal experience-- wins, losses and everything in between-- is your gift! So, lean into that!

Where do you see the field of biohacking heading in the next five to ten years?

Looking ahead, I'm really excited about AI's role in biohacking. I envision AI becoming like a personal health coach, offering tailored programs that cater to our unique needs. Also, I'm hopeful that treatments like NAD and technologies like full body scans will not only advance but also become more affordable and widespread. It's about making these incredible tools accessible to everyone, transforming the way we all approach health and wellness.



[@shiralazar](https://www.instagram.com/shiralazar)

Michelle Barry

Seattle, Washington, USA

Briefly describe your background and journey into the field of biohacking:

I am on a mission to help bridge the gaps in the emerging field of Quantum Health.

Fueled by toxic chemical exposures as a young child and resulting immune and cancer disorders that came along with it, I became a life-long researcher and early adopter of progressive health approaches. I have been working in quantum health and bioenergetics for the past 25 years to empower people to manage their personal energy and positively impact their wellbeing. I hold a PhD in Medical and Socio-cultural Anthropology from the University of Washington, Associates Degree in Visual Communications from the Art Institute of Seattle, am Master's and Instructor Certified in BioResonance and BioPhotonic Quantum Feedback, and a member of the ACEP.

I have been Founder and CEO of quantum and wellness-focused companies with 25+ years consulting leaders in start-ups to Fortune 500s to deliver systemic and sustainable solutions for food, water, supplements, plant-based therapeutics, and non-invasive health technologies. I am co-author of 2 books, appeared on MSNBC, NPR, CNN and Oxygen, served on multiple boards, mentor programs and appeared in national and industry publications as a speaker, lecturer and thought leader for innovations in health, culture change, frontier technologies and energetics.

How would you define biohacking in your own words?

I define biohacking as the strategic and personalized use of cutting-edge technologies, therapies, and holistic approaches to optimize one's health and well-being, with a particular emphasis on harnessing quantum principles and bioenergetics. Biohacking, in my perspective, likely involves leveraging multidisciplinary knowledge to develop systemic and sustainable solutions that incorporate food, water, supplements, plant-based therapeutics, and non-invasive health technologies, all aimed at enhancing overall health and vitality while considering the individual's unique bioenergetic profile.

What are the biggest challenges you have faced as a woman in the field of biohacking?

In the field of biohacking, women often face the dual challenge of underrepresentation and the complex nature of this frontier science. Historically, gender disparities and stereotypes have deterred women from pursuing careers in STEM, making their presence in biohacking less common. Additionally, biohacking itself is an emerging, multidisciplinary domain not widely understood, posing unique challenges for all pioneers, regardless of gender. Navigating this uncharted territory while promoting diversity is crucial for advancing both the science of biohacking and the goal of fostering gender inclusivity in STEM.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

While there isn't just one woman who singularly inspired my journey in this field, it's the collective force of numerous pioneering women that has profoundly influenced my path. Many of these women, despite their exceptional contributions, have often been under-recognized until recently in the field of energetics. Among these trailblazers, two individuals, Beverly Rubick and Carolyn McMakin, have stood out as extraordinarily influential figures in shaping

TOP BIOHACKING WOMEN INSIGHTS

the work I do. Their dedication, expertise, and groundbreaking contributions have not only advanced the field but have also provided invaluable guidance and inspiration for my own journey in the world of energetics.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

Biophotonic energetics balancing, early morning and early evening natural sunlight, structured water, vagus nerve and lymph stimulation, emotion management to balance hertz effects of emotional storage.

Are there any specific biohacks that have made a significant difference in your overall well-being?

Through the utilization of bio-photonic emissions, I have unlocked a profound understanding of the intricate layers of energetics that underpin my overall well-being and play a pivotal role in my healing journey. These emissions unveil the multi-dimensional aspects of my energetic systems, shedding light on imbalances and disruptions that may exist. Armed with this knowledge, I have harnessed the power of personalized healing, making informed choices that resonate with my unique energetic profile. This approach has not only granted me a sense of control and empowerment but has also fostered a holistic integration of mind, body, and spirit in my quest for well-being.

What advice would you give to women who are interested in exploring biohacking or entering the field?

To aspiring women eager to venture into the dynamic realm of quantum health and biohacking:

Embrace your unique background and perspectives, as diversity of thought fuels innovation in this field. Build a strong foundation in both traditional and alternative medical knowledge to form a robust basis for exploration. Prioritize cultural sensitivity and inclusivity, respecting and integrating diverse cultural perspectives. Recognize the value of interdisciplinary collaboration, understanding that quantum health thrives on multiple areas of expertise. Cultivate a deep awareness of

energetic principles through practices like meditation and energy work. Uphold a strong ethical framework, always considering the consequences and ethical implications of your work. Expect and overcome challenges, including skepticism and gender bias, with persistence and resilience. Seek mentorship from experienced professionals in the field for guidance and support. Stay informed about the evolving field of quantum health and biohacking. Advocate for diversity and inclusion in STEM, serving as a role model and mentor for others. Your journey can inspire and empower fellow women, making a meaningful impact in this transformative field while fostering a community of support and growth.

Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

Anything by Beverly Rubick or Carolyn McMakin. The following books: Bioelectromagnetic medicine by Rosch, the Body Electric by Becker, The God Equation by Michio Kaku, The Invisible Rainbow by Green, 30 Second Theory by Clegg, The Fourth Phase of Water by Pollack, Science and Human Transformation by Tiller



[LinkedIn: Michelle Barry, PhD](#)

Julie Kramer

Costa Rica

Briefly describe your background and journey into the field of biohacking:

Ms. Julie Kramer is a serial entrepreneur, visionary, futurist, researcher, and Natural Medicine Doctoral Candidate on a mission to create a global footprint of Quantum to deliver effective Energy Science care. In addition to her present Natural Medicine candidacy program through Quantum University, she holds a degree in Information Systems, is a Certified Maser Reiki Practitioner, Certified Bioenergetic Practitioner, and Ordained Priestess to the Order of Melchizedek. Ms. Kramer is an expert in developing advanced quantum protocols for individualized energy balancing with provisional patents that will be underpinned by "real world" evidence. Julie is a healed two-time rape survivor and health advocate after overcoming her own set of health challenges that inspired her throughout her healing journey to not only learn and experience corrective energy rebalancing, health restoration, and optimization tools, but to become a researched subject matter expert in advanced quantum technologies and create a reputable foundation and platform backed by science.

What are the biggest challenges you have faced as a woman in the field of biohacking?

The biggest challenges I have faced as a woman in the biohacking field, is being a woman in the biohacking field. Not having certain titles behind my name to be taken seriously, however knowing there is no school for this. We are the trailblazing school and the teachers, bringing the education and the experience while discussing topics like

quantum physics, quantum medicine, micro and macro, energy and vibrational medicine, and not only bridging, but also transforming the western medicine paradigm into a new paradigm of "medicine" and biohacking where we utilize what the body is comprised of, to rebalance, optimize and regenerate itself. I do feel many obstacles are in the process of being moved out of the way and its happening quickly.

What are the biggest challenges you have faced as a woman in the field of biohacking?

In the field of biohacking, women often face the dual challenge of underrepresentation and the complex nature of this frontier science. Historically, gender disparities and stereotypes have deterred women from pursuing careers in STEM, making their presence in biohacking less common. Additionally, biohacking itself is an emerging, multidisciplinary domain not widely understood, posing unique challenges for all pioneers, regardless of gender. Navigating this uncharted territory while promoting diversity is crucial for advancing both the science of biohacking and the goal of fostering gender inclusivity in STEM.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

I have personally healed from my own biohacking journey and so I am living walking proof that it works. Overcoming severe traumas not just of my own, but on a generational level. Surviving two rapes in my life, battling an alcohol dependency that transpired from a number of traumas in a short period of time, losing everything, to allow a gateway to open that healed my traumas and addictions. I have also been fortunate enough to be able to share this platform with my clients, family, and friends, who have also experienced the same miraculous and life-changing shifts that came from their biohacking journey. What we do works and the testimonials are proof, along with all the science that backs our work.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

I was inspired by Donna Eden who works with Energy Medicine and I think her work was one of many activations and inspirations for my own work that went steps further into advanced quantum technologies and biohacking.

How do you approach the ethical implications of biohacking and its impact on individuals and society?

I am very firm in my ethical implications of biohacking and its impacts both individually and society. I always say that not all healing technologies are created equal. Nor are all biohacking methods created equal. We always need to have discernment in our field because what we are doing impacts on micro and macro levels. We are not here to play "God" (i.e. growing and incubating new life to be "designed") but we are here to share how we can optimize our body's natural healing and regenerating abilities. I do not use blue tooth or wireless technologies because we know the implications of these radioactive and harmful frequencies. I am also very clear that this work is not to esthetically enhance someone, but instead to stay mindful of the health and regenerative healing benefits. Its important to keep our integrity, intentions, and ethics in check with this work.



Are there any specific biohacks that have made a significant difference in your overall well-being?

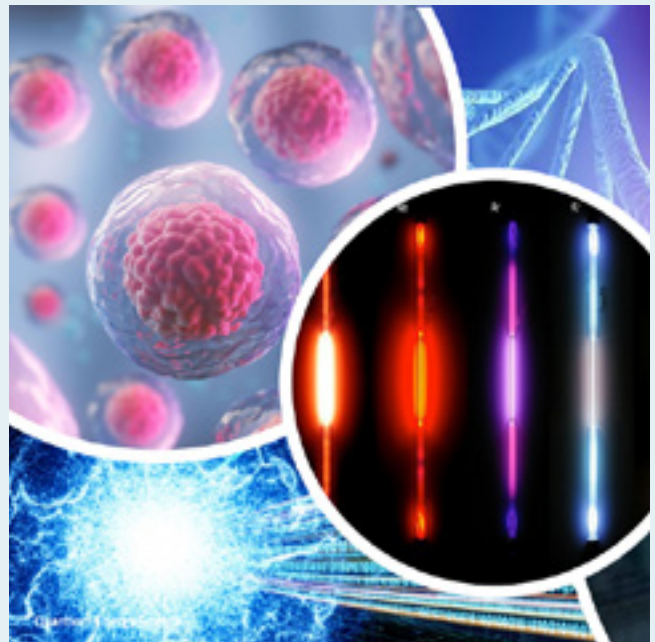
Daily routines include bioanalysis (energy measurement scans), tesla biophotonic lights, rife therapy with hydrogen/oxygen inhalation, grounding practices (beach, water, hiking through jungle), sunlight or chromotherapy, keeping my energy in space of gratitude, joy, and inspiration. Also taking days to detox the body through natural means (thermal fluctuations, mushroom teas, manuka honey, dried apricot seeds, moringa tea, DE)

Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

www.quantiom.org

Biohacking Summits, Conferences, Magazine

[@quantiomenergyscience](https://twitter.com/quantiomenergyscience)



Chloe Porter

Orlando, Florida, USA

Briefly describe your background and journey into the field of biohacking:

My journey began with a range of undiagnosed symptoms, but a pivotal moment came when I ended up in the emergency room... Despite leaving the ER without a diagnosis, months later, as I was losing my vision, an MRI revealed a brain tumor. Surprisingly, I felt a glimmer of hope, hoping surgery would restore my life. However, post-surgery and after days in the ICU and months of recovery, I still felt unwell.

I delved into research, drawing on my background as a former laboratory research scientist and author of scientific literature publications. Eventually, I discovered biotoxin illness, which resonated with my symptoms. Extensive bloodwork confirmed Lyme disease and mold illness, both biotoxin-related. These illnesses triggered inflammation, neuroinflammation, hypoxia, and digestive issues.

I embarked on a protocol to address Lyme and mold but quickly also realized my gut needed significant repair from the damage caused by these illnesses. This prompted me to document "75 Gut-Healing Strategies & Biohacks" that played a crucial role in reclaiming not only my gut health but, in a way, my life.

Understanding Your Biohacking

Biohacking is unique to each person, in the sense that everyone has their own vision of optimisation, please help us understand yours

How would you define biohacking in your own words?

To me, biohacking is "data-driven wellness." It is not about obsession or manipulation. It is about merging wellness with data to ensure a life of optimal vitality, longevity, and balance.

What are the biggest challenges you have faced as a woman in the field of biohacking?

I believe that there are no inherent challenges to being a woman in the field of biohacking. It all comes down to mindset and perception. I approach my journey with unwavering confidence in my past experiences, my present path, and my future endeavors. Instead of dwelling on self-limiting beliefs or perceiving challenges, I actively seek and embrace opportunities. I harness the power of my feminine energy, using it as a guiding force in my biohacking journey. My aim is to lead by example, demonstrating that a strong and empowered mindset can transcend any perceived barriers, allowing me to thrive and make a meaningful impact in the world of biohacking. We each see the world through a lens characterized by self-perception and self-belief. I want everyone to see "opportunity" rather than "challenge."

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

Absolutely! One of the most fulfilling achievements in my biohacking journey has been writing my book, "75 Gut-Healing Strategies & Biohacks." My ultimate goal has always been to bring value to others. I don't just want people to be free of illness, but I aspire to empower them to thrive in life. If my book can serve as a resource for even one person, I consider that a significant accomplishment. Moreover, my innate happiness and love for people drive me to spread positivity. When I can inspire or encourage someone to explore biohacking and take charge of his/her health, and witness the happiness it brings him/her, that, to me, is the ultimate reward.

Who or what inspired you to pursue biohacking?

My inspiration to pursue biohacking can be traced back to my parents (who didn't know they were biohackers). From a very young age, my father, one of the country's top chiropractors, inspired me to take control of my physical health. Meanwhile, my mother, a doctor of psychology, imparted invaluable wisdom on mindfulness, self-love, wellness, and balance. As a family, we formed an unbreakable bond and a shared commitment to well-being, and I am so grateful to have been raised in that environment. Whether it was tackling triathlon obstacle courses together or visiting the infrared sauna as a team, our collective journey in pursuit of health and longevity has been an enduring source of inspiration and motivation.

Are there any specific biohacks that have made a significant difference in your overall well-being?

During my recovery from mold and Lyme disease, one of the biohacks that made a remarkable difference in my overall well-being was the incorporation of peptide therapies. There are so many great peptides and even bioregulators that really made a difference!



[@synthesisofwellness](https://www.instagram.com/synthesisofwellness)



Lauren Sambataro & Renee Belz

New York, New York, USA

Briefly describe your background and journey into the field of biohacking:

We are sisters! We grew up in a health-curious household with our Dad, who we call the OG Biohacker and is a Biological Dentist. As dancers, we intuitively connected to the needs of our bodies and through our own health challenges, learned that we had to empower ourselves through self-discovery and intelligent Nof1 experimentation to fully optimize our unique and bioindividual wellness potential. The common denominator here was that Traditional Medicine didn't have any answers for us, leading us to look at alternatives such as naturopathic medicine, functional medicine, nutrition, biohacking, and more. After taking different paths to earning an International Business degree in Tampa, Florida and performing in dance companies and on Broadway in New York, we circled back to our shared passion of Biohacking - a deep curiosity and desire to be the best versions of ourselves!

What initially attracted you to the concept of biohacking?

That there was another way than the conventional medicine approach of "pill for an ill", and that there was more than a one-size-fits-all approach. When we were each facing our own personal health challenges, we realized we had to put together the pieces of our own bioindividual health puzzle. For Renee, it was detoxing from mercury, boosting immune function to fight the Epstein-Barr virus, optimizing circadi-

an rhythm, balancing blood sugar, healing leaky gut, and supporting quality (not just quantity) of sleep. For Lauren, it was doing less, rather than shooting for productivity and perfectionism, in order to heal her HPA axis and immune system so she wasn't getting sick every season of the year. Biohacking offered great possibilities and opportunity for us to raise the bar on how we COULD and SHOULD be feeling day to day.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

1. Using plant medicines to help breakthrough mindset blocks and stuck narratives
2. Returning to an Omnivore diet after years of vegan/vegetarian eating that only left me sick, weak and injured!
3. Gaining access to comprehensive functional medicine testing that gave us answers!
4. On a professional note: becoming one of Ben Greenfield's coaches, being interviewed LIVE on Fox News about Metabolic Health, and together hosting panels at the Biohacking Congress, as well as Emceeing the upcoming Dragonfly Conference in Denver this year.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

Dr. Mindy Pelz - she is truly paving the way for women to use their menstrual cycle as a superpower!

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

Morning sunshine + Mobility/Movement
Oura Ring data quantification

AmpCoil for down regulating the nervous system and optimizing the subtle energetic frequencies of the body

BrainTap for brain wave entrainment
Minimizing blue light at night

Microdosing plant medicines to shift narratives and mindset that may be holding us back or get in the way of healing!

What advice would you give to women who are interested in exploring biohacking or entering the field?

Choose one tracker or piece of data to start
Get intimate with your monthly cycle! This can truly be your superpower and make everything easier! Trust your intuition above everything else. Only you know your body best, trust that.

Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

Ben Greenfield's Boundless
Paul Chek's Eat Move & Be Healthy
Ben Bikman's Why We Get Sick
Mindy Pelz' Fast Like a Girl

Where do you see the field of biohacking heading in the next five to ten years?

We're not sure if it will be called "biohacking" or "health optimization" but it will definitely gain traction. A majority of the population will be using some sort of tracker like an Oura Ring to help optimize.

There will be a major return to ancestral living where communities and nature will be more integrated into home life. We believe it is essential in the biohacker's journey to collect both subjective and objective data, especially for wom-

en. Most of the research in the health industry has been done on men, so we are lacking major resources and education to help women really personalize and optimize. Subjective data is powerful, because AI and tech can't possibly know your body as intimately as you do. On the other hand, objective data can help us with our blind spots, it can fill in the gaps and motivate and inspire us when we need it most. A balance of the two is a beautiful equation for true optimization.



[@lauren_sambataro](#)

[@reneebelez](#)

Natalia Naila

Los Angeles, California, USA

Briefly describe your background and journey into the field of biohacking:

Before diving into the world of health and life coaching, I had a successful career working as a stylist and fashion designer in Hollywood. I realized that my passion lay elsewhere, and I chose to follow a path I felt truly passionate about. I dove into books, listened to countless podcasts, and attended workshops and conferences. The more I learned, the more fascinated I became.

Now, what drives me every day, is the resilience and determination I see in my clients. There's something truly special about being part of someone's path to better health and happiness. Each one of them, with their unique challenges and dreams, reminds me of my own personal journey. Seeing their eyes light up when they achieve a milestone, or when they discover something new about their health, is truly rewarding. I get to be a part of their growth, their transformation. And in doing so, I'm constantly reminded of why I chose this path. It's about connecting, sharing, and growing together.

How would you define biohacking in your own words?

Biohacking, to me, feels like tuning an instrument, ensuring it plays its best music. It's about listening to our bodies, understanding their needs, and making adjustments to reach our highest potential and feel our best. From wearing simple gadgets that track my daily steps and sleep to experimenting with different foods and supplements, with biohacking tools and tech-

niques, you can truly transform from the inside out, not just externally. So this is not just about looking good, it's about forging a deeper connection with ourselves and recognizing that true health and happiness come from feeling genuinely good inside. It's about health, vitality, and living a longer, fuller life.

What initially attracted you to the concept of biohacking?

The turning point for me was after giving birth. There's an undeniable transformation that motherhood brings, and for me, it came with a heightened awareness of aging. I didn't want to simply watch myself grow older, I wanted to be proactive about it. The idea of aging prematurely wasn't one I was willing to embrace. This drive led me on a quest for proper nutrition and, eventually, to discovering the world of biohacking. My goal has always been to find ways to reverse the aging process and maintain a youthful spirit and body.

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

One of my proudest moments was when I received the results of a test that measured my biological age. In a span of just 8 months, I had managed to reverse my age by 2.5 years! To date, I've achieved a total anti-aging milestone of 3 years and 9 months and to be clear, this is not just a number written on a piece of paper. I genuinely feel younger, more vibrant, and full of life. And I'm not stopping here. My goal is to push the boundaries even further. Some of the leading figures in biohacking believe that reversing age by up to 20 years is feasible. So, I say, why not aim for that? Bring it on!

Who or what inspired you to pursue biohacking?

David Sinclair's groundbreaking work caught my attention first, followed by Valter Longo, Ben Greenfield, Dave Asprey and Dr. Mark Hyman.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

Absolutely! Jessie Inchauspe, the brilliant mind behind "Glucose Goddess" and the author of "Glucose Revolution", has been a game-changer for me. Her work opened my eyes to the pivotal role glucose plays in our health. Diving deep into glucose monitoring, I was able to truly grasp the essence of individual metabolic health from her book. It became clear that we each have a unique metabolic fingerprint, and understanding this can revolutionize our health choices. By consistently tracking my glucose levels, I've tailored my diet to suit my body's needs, optimizing for energy and overall wellness. Jessie's insights have been instrumental in this journey, teaching me to prioritize stable blood sugar levels, leading to improved health, weight management, and enhanced vitality.

Are there any specific biohacks that have made a significant difference in your overall well-being?

Peptides have been a game-changer for me. Also infrared saunas, the precision of supplementation, and the insights from monitoring my glucose levels have all collectively played a pivotal role in shaping my health journey.



Are there any specific resources (books, websites, communities) you would recommend to those looking to learn more about biohacking?

I've been greatly influenced by several resources. Here are my top 5 book recommendations for anyone eager to delve into biohacking:

- "Forever Young" by Dr. Mark Hyman
- "Fast This Way" by Dave Asprey
- "Glucose Revolution" by Jessie Inchauspe
- "Life Force" by Tony Robbins
- "Fiber Fueled" by Will Bulsiewicz

Where do you see the field of biohacking heading in the next five to ten years?

I believe we're on the cusp of unlocking unprecedented potential in ourselves. As we go deeper into biohacking, we're not just looking at enhancing our current state but pushing the boundaries of what it means to be human. Imagine a world where we can operate at peak energy levels consistently, reverse the signs of aging, and function like an ever-charged battery. The future holds the promise of deep insights into our cellular workings, even down to our mitochondria. With advancements in technology and research, we'll soon have the tools to monitor and measure these processes, pushing our understanding and capabilities to new heights.

[@natalianaila](https://www.instagram.com/natalianaila)

Dr Julia Jones

London, United Kingdom

Briefly describe your background and journey into the field of biohacking:

I was first shown how to use music as a biohack when I visited the US Navy SEALs base in Coronado, CA when I was a young Sport & Exercise Science undergraduate in the early 1990s. They explained how they were using music to increase physical endurance, boost motivation, mood, control stress and anxiety etc. As a musician and DJ I found this absolutely fascinating!

My Master's degree research examined the effect of music synchronization on exercise endurance (through reduced / delayed perceptions of pain and fatigue). It was published in the Journal of Sport Sciences and formed part of a landmark series of scientific studies in the exercise-to-music field. This led to me working as a Psychologist with GB Olympic swimming squads in the late 1990s. I taught them how to use music to enhance performance. Music became a staple part of elite swimming training methods and is still used extensively today.

I began to see how music experiences from youth last a lifetime (even when other memory functions are lost). My PhD research then examined this effect in more detail and led to me developing a music strategy for the NHS' first dementia village in the UK. Working with dementia projects sparked my desire to revisit preventative health to discover why 50 years of huge diet and fitness trends have failed to produce healthy nations. As diet and fitness revenues have grown

over this time so have average waistline size and the scale of the chronic disease and mental health problem. These protocols don't work so I began a 5-year research project titled "Smart Wellness" to find out exactly why they failed.

During this time I went back to school and gained a Postgrad in Applied Neuroscience at King's College London. My 5-year research project ended in Sept 2023 and clearly showed that any health approach that requires effort or cost will NOT be sustained for a lifetime by most people. This means we need to teach approaches that involve very low effort and low/no cost. Biohacking fits this criteria (natural biohacks). My research also highlighted that three specific simple, habit hacks (natural biohacks) are far more likely to succeed because most people found them easy to embed in their daily routine.

So I am now on a mission to spread this knowledge and I have been collaborating with colleagues to create simple, affordable ways to help people achieve these habit-hacks through:

1. Our new simple habit-hacking programme called Holidity. <https://holidity.com/>
2. Our MusicHacks collection to practice specific breath techniques through their existing music listening habit (in partnership with Universal Production Music)
3. Our new coffee called Hack that helps people boost intake of prebiotic fibre, vitamins and minerals through their existing coffee habit (only available in UK at the moment)

What are the biggest challenges you have faced as a woman in the field of biohacking?

As a 53 year-old founder of a startup in the wellness and biohacking space I have definitely noticed that it's harder (but not impossible) to attract investment. I've also noticed that TV and conferences are largely dominated by male experts and not female. I'm pushing hard to change

that. It also surprises me that music is not taken more seriously in the biohacking field. The ears lead to the brain and music is also received via the skin. It's one of the most effective and fast-acting biohacks on the planet. I've been immersed in this science for 30 years - which is why over the years I began to also be known as 'Dr Rock'

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

In 2021, my first Amazon bestseller book - 'Neuron' - was published and I began to receive messages from people who had read it and had started trying the simple biohacks in their own daily routines. They had noticed life-changing benefits. That is very rewarding when you see your work making a difference out in the world.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

Zorrie and Nikolina, the COO and CEO, of GlycanAge are a total inspiration and I am a big fan of their work. They are so deeply passionate about the underlying science and the ongoing research. They are not purely driven by the business side. Like me they want to help solve the global health crisis. Their product and the service they offer is superb and the research outputs from their lab are groundbreaking in the field of longevity.

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

The 3 hacks that came out of my research as the ones most people can successfully sustain are:

- 1 - Timed eating (within an 8-10 hour period and preferably not close to bedtime)
- 2 - Timed breathing (slowing breath and extending exhales)
- 3 - Timed daylight exposure (getting early daylight and avoiding bright lights at night)



[@drjuliajones](https://www.instagram.com/drjuliajones)

Elena Krail

Ukraine & California, USA

Briefly describe your background and journey into the field of biohacking:

Elena Krail is a popular health, fashion, and lifestyle personality online, yet considers her deep advocacy for research into treatment and prevention strategies for Lyme and other chronic diseases to be her most important pursuit to date. A Lyme sufferer herself, Elena has used several biohacking methods to support her recovery, and as such uses her platform of 3.5M followers to boost new developments as they relate to biohacking, health, and wellness. Now, with almost a hundred articles published at www.lenasworld.com - where she also shares her unique stories relating to health, fashion, travel, and food - Elena is eager to continue building on what she's learned from her first-hand experience treating Lyme, and hopes to finish the year strong by creating more awareness about chronic illness in general at public speaking events across the United States.

How would you define biohacking in your own words?

Biohacking is all about access to the power of your own biology. It's about taking charge of how your body functions, and enjoying the massive mental and physical benefits that go along with that. Basically, biohacking is centered on an understanding with yourself that says, I am in charge of my body, and it is my responsibility to follow-through on that. Best of all, it is a worldwide practice that anyone can partake in by making small changes to your sleep, diet, and more, and then tracking those results over time. Setting goals is a big part

of this practice as well, so whether your goal is to improve your physical performance, weight loss, or improving your overall wellbeing, biohacking sets you up for success to achieve that goal!

What initially attracted you to the concept of biohacking?

When you have tried everything to tackle your chronic disease (I have CFS and chronic Lyme), only to be failed time and again by a more westernized approach to medicine, the natural outcome is to take your health into your own hands. So, as I continued to do research to improve my condition, I found out about biohacking and the simple, secure ways it could provide gradual boosts to my health and wellbeing.

What are the biggest challenges you have faced as a woman in the field of biohacking?

Thankfully, my challenges with biohacking have been few and far between, particularly as a woman entering a more scientific field of study. So if I'm being honest, the biggest hurdle is the neurological symptoms I live with that are caused by chronic Lyme disease. And it may be partly due to the success I've had with biohacking, but most people take me seriously when they see how I've recovered so far, and often ask tons of questions about what I have done. In that respect, I usually say to keep in mind your specific needs, otherwise even more challenges could crop up!

Could you share a notable achievement or breakthrough you've experienced in your biohacking journey?

There is no other experience quite like seeing success from a new biohacking technique I've decided to try. Even better, these successes mean a better quality of life for myself, and anyone else who may be living with chronic illness. Plus, my inner scientist loves experimenting with different methods and modalities to find these successes again and again, but I do try to build causal relationships between my symptoms and any biohacking techniques I apply. That way, I can tell for sure what's working for me, and what's not, as I keep improving my health.

Are there any women in the field of biohacking who have served as your role models or mentors? If yes, how have they influenced your work?

Oh, I cannot uplift Daisy White enough as an answer here. She is my health coach, and in light of her own personal biohacking journey to wellness (from chronic Lyme!), she became a wealth of information and my personal inspiration to keep moving forward to fight for my body, and my health!

Could you share some of your favorite biohacking practices or techniques that you incorporate into your daily routine?

There are so many that have worked for me, and which I continue to implement as a part of my overall healthcare routine. That list includes earthing, red light therapy, and using a PEMF mat daily. Personally, I think biohacking your sleep is one of the biggest jumping off points. Without that your body cannot heal on a deeper level. One of the things I do to support sleep is to track my sleep stages and apply modalities that target deep sleep. Oh! And I would also recommend regulating your nervous system with different methods, such as IV therapy or peptides.

Are there any specific biohacks that have made a significant difference in your overall well-being?

There has definitely been some improvements and difference with almost every biohacking modality I've tried, but I would say the best has been red light therapy, changing my diet to incorporate high protein/low carb options without sugar and gluten, my PEMF mat, peptides, and a variety of IV treatments.

What advice would you give to women who are interested in exploring biohacking or entering the field?

Be fearless, and listen to your intuition. Trust yourself and go with your gut. There's so much to discover out there, and we all have the power to heal what ails us. Just remember, you know you best. You've got this!

Where do you see the field of biohacking heading in the next five to ten years?

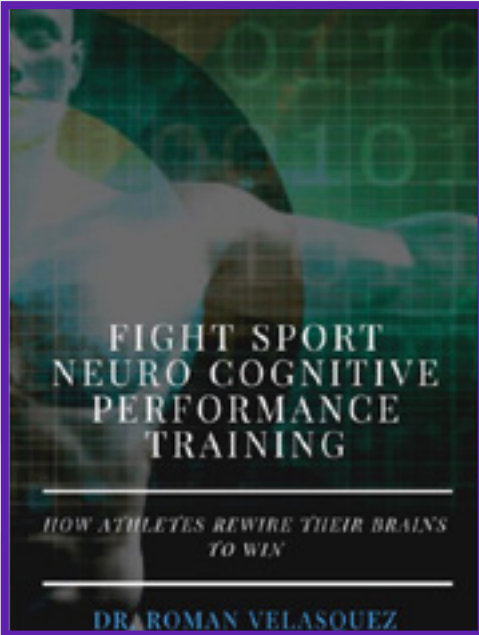
I think we are on the crux of a total biohacking 'explosion'. I see the term entering our mainstream conversations more and more often, and as more people practice biohacking methods and modalities, even more successful treatment options are sure to evolve!



[@panthere_instyle](#)

REVOLUTIONIZING WELLNESS: TOP 10 BREAKTHROUGH BOOKS OF 2023

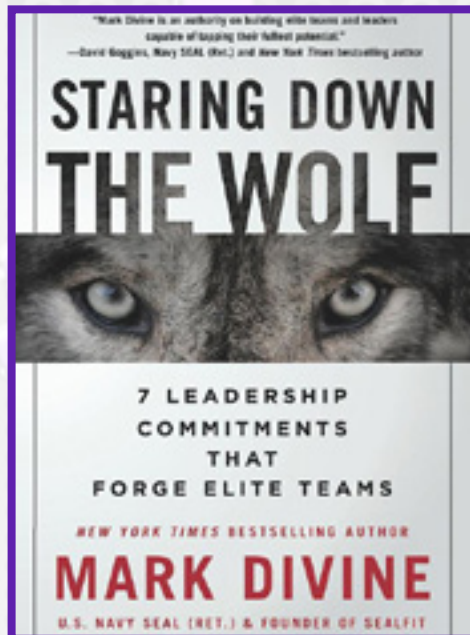
"FIGHT SPORT NEURO COGNITIVE PERFORMANCE TRAINING" by DR. ROMAN VELASQUEZ



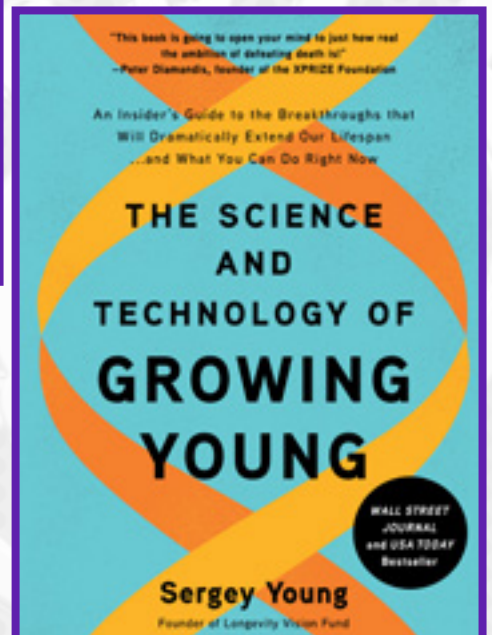
"BOUNDLESS PARENTING" by BEN GREENFIELD



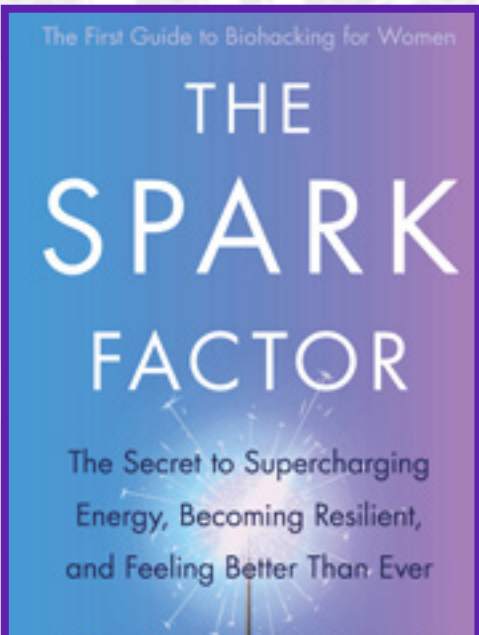
"STARING DOWN THE WOLF" by MARK DIVINE



"THE SCIENCE AND TECHNOLOGY OF GROWING YOUNG" by SERGEY YOUNG

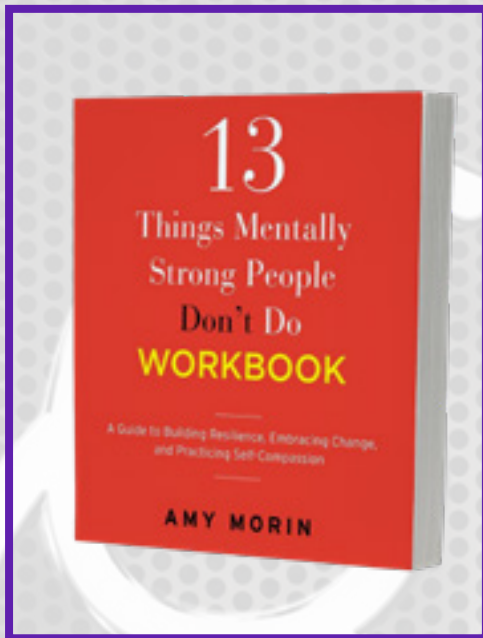


"THE SPARK FACTOR" by DR. MOLLY MALOOF

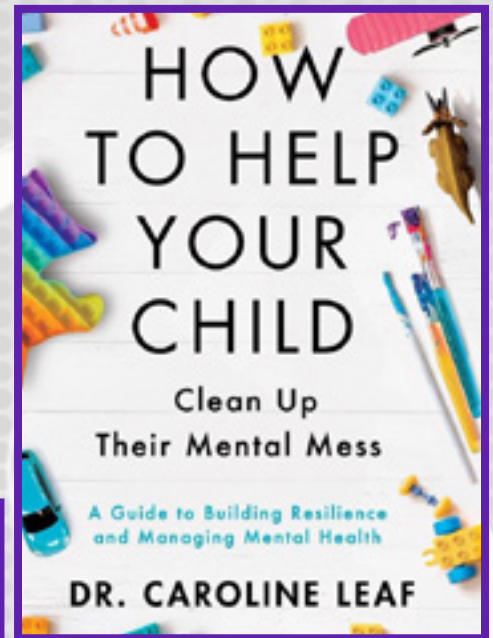


REVOLUTIONIZING WELLNESS: TOP 10 BREAKTHROUGH BOOKS OF 2023

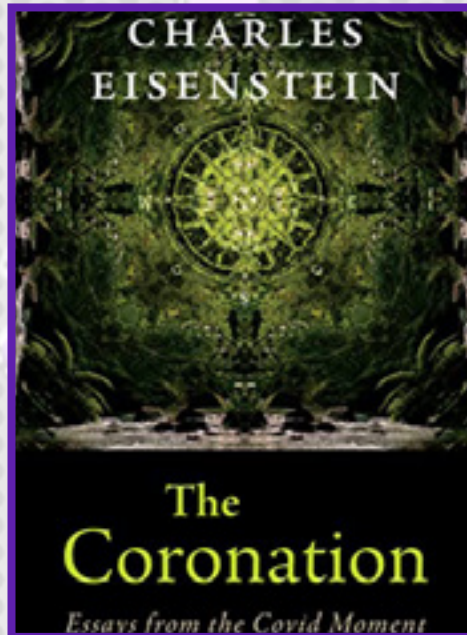
"13 THINGS MENTALLY STRONG
PEOPLE DON'T DO" by AMY MORIN



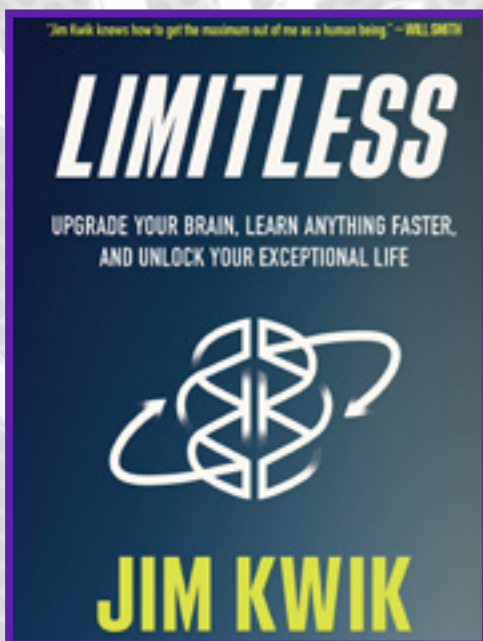
"HOW TO HELP YOUR CHILD CLEAN
UP THEIR MENTAL MESS" by DR.
CAROLINE LEAF



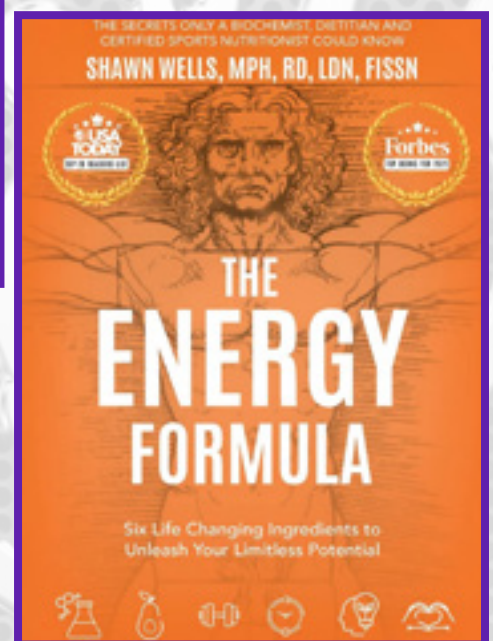
"THE CORONATION"
by CHARLES EISENSTEIN



"LIMITLESS"
by JIM KWIK



"THE ENERGY FORMULA"
by SHAWN WELLS





"Transform Aging, Improve Metabolic
Function, Enhance Detoxification,
Support Immune Function, & More"

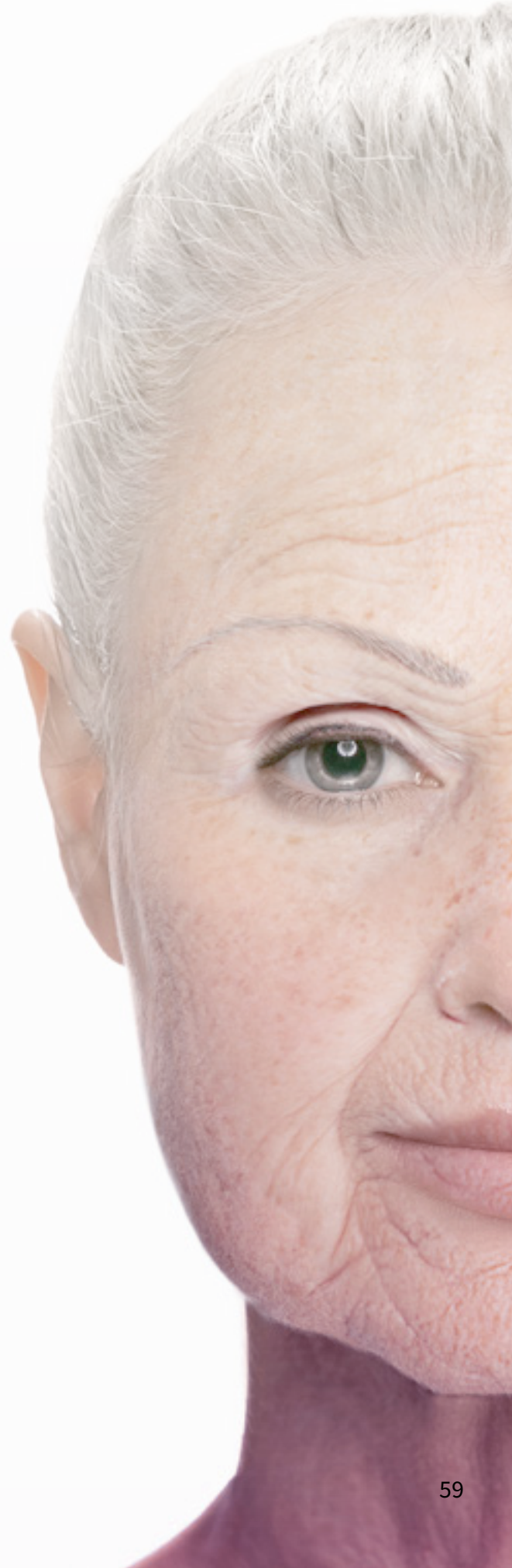
BALANCE WITH PEPTIDE BIOREGULATORS

CHLOE PORTER

Let's begin by briefly revisiting the concept of a peptide. A peptide, as you know, is a short chain of amino acids. One significant distinction between a peptide bioregulator and some other peptides, such as BPC-157, lies in its size. Peptide bioregulators, typically consist of only 2-4 amino acids, whereas BPC-157, for example, contains 15 amino acids. Thus, as you can see, peptide bioregulators are di-, tri-, or tetrapeptides, making them much smaller in size. This size advantage is noteworthy because it enables these peptides to more easily penetrate cell membrane, including the nuclear membrane, allowing them to reach the DNA within the cell. This is particularly advantageous and something we'll talk about more later on.

But, before delving too deep into peptide bioregulators, it's important to take a step back and understand what these unique molecules are capable of within the body. Simply stated, they play a crucial role in restoring balance to specific organs within the body; in other words, these peptides are tissue-specific. For instance, a peptide bioregulator derived from thyroid tissue will exert a tissue-specific effect on thyroid gland cells, helping to restore proper function to disturbed thyroid tissue, whether it's overactive or underactive.

With this broad overview in mind, let's now explore how peptide bioregulators exhibit these unique tissue-specific effects. To do that, it's essential to remember that all cells in the human body contain the same DNA. So, what makes cells different from one another? The answer lies in gene regulation, or the activation/repression of genes within a cell's genetic material. Essentially, gene regulation ensures that each cell type in your body has a distinct set of active genes, a process often referred to as epigenetic regulation of cellular differentiation. This process involves permanent gene silencing or activation in order to differentiate cells. The reason this information is so critical is because it effectively lays the foundational knowledge for explaining how these peptide bioregulators can enter the body, yet only affect certain tissues. Now that this distinction has been made, it is important to remember that our discussion around peptide bioregulators focuses on gene regulation that affects a cell's functional activity, rather than cellular differentiation.



Now, revisiting the earlier discussion: because peptide bioregulators are only 2-4 amino acids in length, they are able to cross the cell membrane and nuclear membrane in order to interact with DNA. This ultimately allows them to influence gene regulation. Specifically, these peptides affect the genome's condition, promoting the expression of certain genes responsible for synthesizing specific, key proteins. And, of course, these proteins are critical for the organism's physiological functions.

But how do these tiny peptide bioregulators influence the genome's condition exactly? One mechanism, as described in the literature, involves the following peptide-DNA interaction: the peptide can bind to histone proteins and increase the transcription availability of gene promoter zones. Simply stated, the bioregulator peptide binds to a histone protein and can promote the expression of a gene.

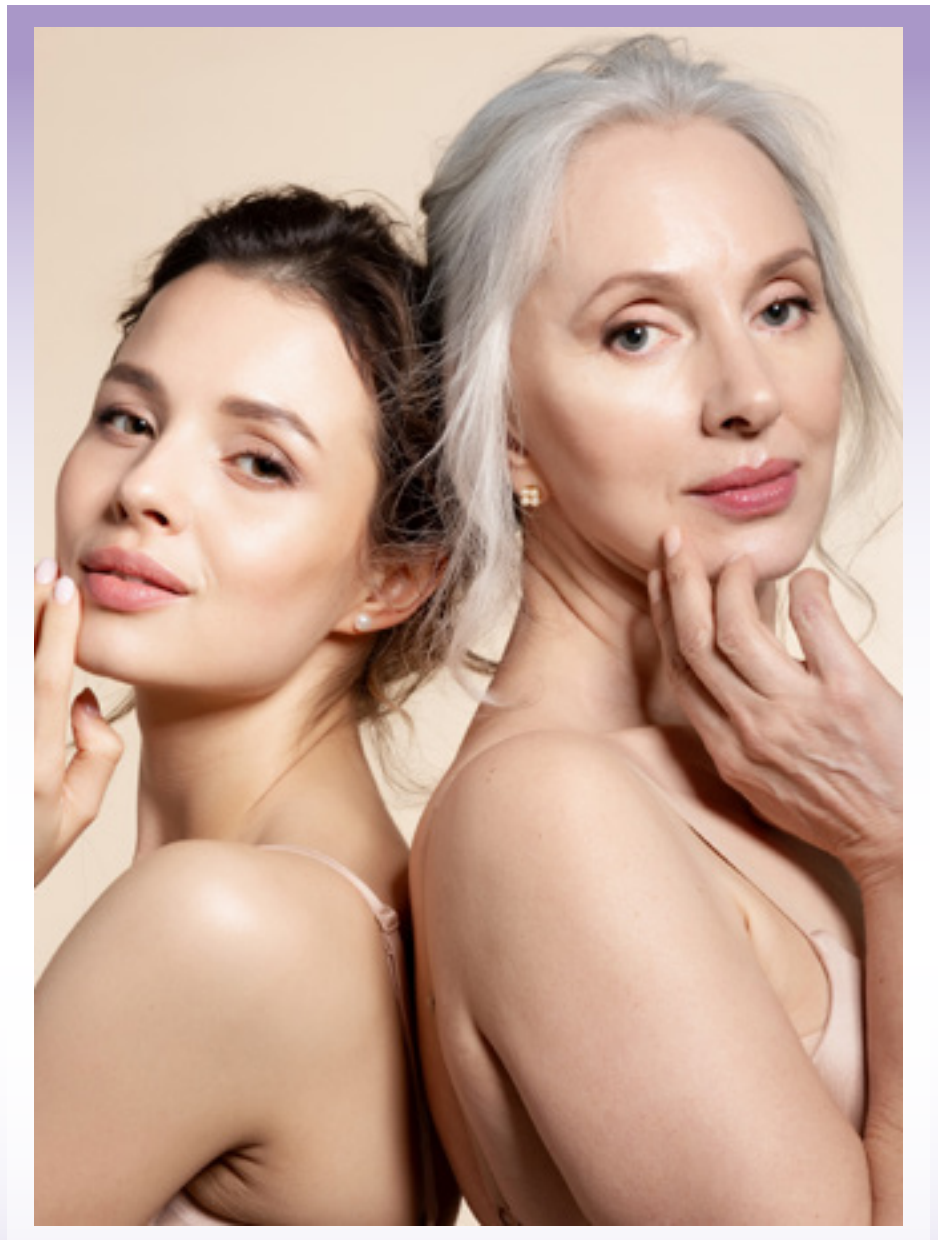
Now, this unique interaction between peptide bioregulators and DNA ensures that the peptide can only activate the expression of genes specific to the phenotype of the corresponding subpopulation of cells within a given tissue. This offers some explanation as to how and why peptide bioregulators are tissue-specific, and it further sheds light on the peptide bioregulator's mechanism of action.

With that said, before we delve into specific peptide bioregulators, it's essential to under-

stand the motivation behind their discovery (and therapeutic use). First, early on, researchers recognized the importance of studying the mechanisms underlying age-related changes in homeostasis, and through their research, they were able to attribute many of these changes to a decline in the synthesis of regulatory peptides. In other words, a decline in the synthesis of key peptides, as one ages, leads to the suppression of various body functions. This is the predica-

ment that paved the way for further exploration which was largely led by Vladimir Khavinson.

Now, to address the scientific need for combating the age-related decline in peptides, researchers began extracting certain types of peptides from animal tissue. Initially, peptides were isolated from the pineal gland, thymus, and hypothalamus; then, the heart, kidneys, liver, and more. These peptide molecules extracted from different tissues were



collectively termed cytomedines (as termed in the literature), derived from the Greek word "kitos" for "cell" and the Latin word "mediator," meaning "transmitter."

After analyzing the amino acid composition of these peptides extracted from animal tissues, Khavinson and his team explored the creation of synthetic peptide bioregulators. So, to distinguish between the peptide extracts and the synthetic bioregulator peptides, the term "cytogen" was developed and subsequently used to describe the synthetically-created, but more highly-concentrated peptide bioregulators.

Now, let's proceed to discussing some specific bioregulator peptides. There are over 20 of these peptides, so we won't cover them all, but we'll highlight several noteworthy ones.

Thymagen: Originally extracted from the calf thymus and later synthesized, Thymagen is a dipeptide. It exhibits immunomodulatory effects and has been shown in the literature to help restore

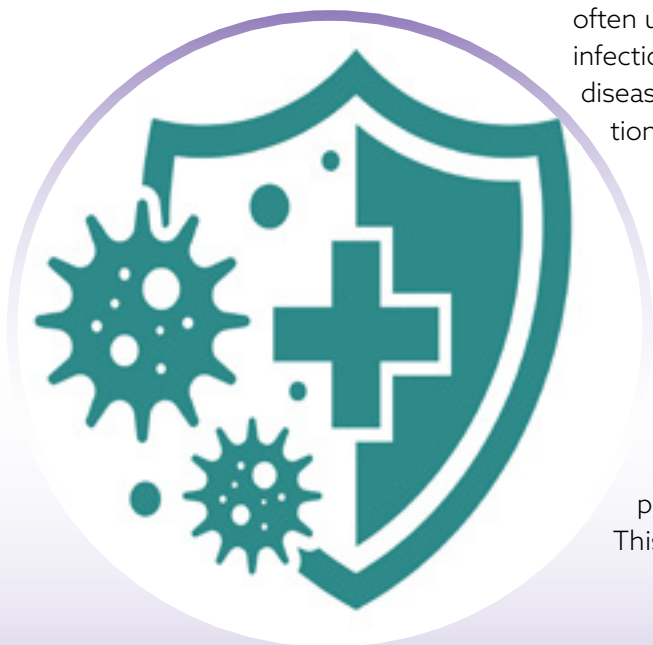


immune systems in animals with immunodeficiencies. Thymagen can also increase cell signaling in immune cells, reduce pro-inflammatory cytokine levels, and more. And, of course, it achieves these effects by regulating gene expression and promoting the proliferation and differentiation of specific lymphocyte populations. Clinics often use Thymagen to help treat infections, injuries, inflammatory diseases, autoimmune conditions, and radiation exposure.

Epithalon (Epitalon): This synthetic derivative of Epithalamin, a polypeptide complex from the pineal gland, has notable effects on lifespan. In one study, epithalon administration extended the lifespan of female rats by 25%. This is somewhat unsurprising

considering the fact that Epithalon increases telomerase activity which ultimately leads to telomere elongation. In more detail, it activates the expression of the telomerase gene within somatic cells, potentially prolonging cell population lifespan and overall organism lifespan.

Cortagen: Derived from cortexin, which was extracted from grey matter, Cortagen is a tetrapeptide. It enhances neuroprotective therapy for chronic cerebral ischemia, preventing the loss of behavioral patterns and promoting individual behavior restoration in animals. In humans, Cortagen demonstrates therapeutic effects in the structural and functional posttraumatic recovery of peripheral nerve tissue. With that said, and as expected, it primarily benefits the central nervous system.





Pancragen: A tetrapeptide with the amino acid sequence lysine, glutamic acid, aspartic acid, and tryptophan, Pancragen addresses age-related metabolic dysfunction, particularly in type 2 diabetes and hyperinsulinemia. Studies on monkeys found that Pancragen increased the glucose disappearance rate and normalized plasma insulin levels. Notably, its positive effects persisted even after discontinuation, making it promising for age-related metabolic issues.

Pinealon: This tripeptide, consisting of glutamic acid, aspartic acid, and arginine, is credited with regulating the pineal gland and supporting circadian rhythm, melatonin production, and more. It is rather neuroprotective and has been shown to assist in neuronal cell maintenance. With that said, Pinealon shows potential in Alzheimer's disease treatment and memory enhancement as well.

Before concluding, it's worth mentioning that most research on peptide bioregulators involves injections, although some clinics offer oral capsules or sublingual forms depending on use and availability (oral capsules are only available for certain peptide bioregulators). I will mention that two of my favorite peptide bioregulators are **vesugen** (for circulation and blood vessel support) and **ovagen** (for liver support) since I prioritize blood flow and detoxification as foundational assets to my overall health.

Now, with that being said, working with a licensed physician experienced in peptide therapy is not only essential for determining the appropriate administration method but also to ensure that peptide therapy using peptide bioregulators is right for you.

Chloe Porter



Chloe Porter, the CEO and Founder of The Synthesis of Wellness LLC, is an extraordinary figure in the realms of health, wellness, and biohacking. Her exceptional journey, marked by resilience and tenacity, has shaped her into a highly sought-after expert. A research scientist with published scientific literature behind her name, an engineer, and an accomplished author, Chloe boasts a diverse background that uniquely positions her in the wellness industry. What further distinguishes Chloe is her remarkable journey, one marked by profound challenges that led to her authoring the groundbreaking book, "75 Gut-Healing Strategies & Biohacks." This literary achievement, underscored by an impressive 200 scientific research citations, has earned accolades from leading doctors and gastroenterologists.

Chloe's motivation to pen this book was deeply personal, stemming from her own battle with a brain tumor and the complexities of Lyme Disease and CIRS-WDB. Chloe's determination in the face of adversity not only led her to become one of the youngest female biohackers to date but also fueled her passion for advancing the field of gut health optimization.

[@synthesisofwellness](https://www.instagram.com/synthesisofwellness)

A close-up portrait of a man's face, focusing on his right eye and cheek. He has dark hair and light-colored eyes. A dollop of white cream is applied to his right cheek. The background is dark and out of focus.

FROM SKINCARE REP TO CEO

How I accidentally became an entrepreneur
Isabel Vitale, 25. Founder and CEO of SIV

When I was young, I never wanted to be an entrepreneur. Growing up in a household where your parents owned a small, local business will do that to a person. I had a front row seat to the ups and downs of running a business. I remember telling my parents that I thought the greatest luxury is being able to clock in at 9 and clock out at 5- no need to worry about payroll, scaling, other employees, etc. I used to think "dull work life, exciting personal life." That's the balance for me!

In fact, if you would have asked me what my 'passion' was a few years ago (something apparently EVERYONE feels at liberty to ask if you're a college student), I would have told you 'I don't really have one,' which is what I told the people who did ask- but that was the truth.

There was nothing that I could think of that I would 'be willing to do for free' or 'feel like I wasn't working,' or any of the common 'find your passion' type of tropes.

So when I graduated from DePaul University in Chicago in 2020 with a Bachelor's degree in Communications, I thought my career path would be pretty much the status quo. Find a job I liked (probably not loved), excel enough to earn some promotions, and then essentially ride that wave into retirement. In other words: corporate or bust. And that's exactly where I found myself. Right out of college and in the midst of the COVID-19 pandemic, I landed a great job selling skincare products to pediatricians for the largest cosmetics company in the world. I was set! My goal was to work my way up the corporate ladder and live happily ever after.

Apparently, though, God had something else in mind. SIV was started out of two things:

1. a genuine need in the market (myself included in that).
2. an unrelenting inner voice that, despite how hard I tried to push her down, just got louder and louder with every passing day.

1) A genuine need in the market, myself included

As I mentioned before, I sold skincare products to pediatricians as my job. Every day I would hear



time and time again how all of these kids had these horrible chronic inflammatory skin conditions- specifically eczema and acne. It really got me thinking - Despite the saturated skincare market, the new science we have around skin, and the increased popularity of skin routines with targeted products, the prevalence of these inflammatory conditions is RISING... I thought this must just be because I now work in a field where these disease cases were relevant to me. So like every good employee would, I took to Google to do some additional research.

I thought this new increased prevalence phenomenon was just confirmation bias because of my job, but boy was I proven wrong.

- "Skin and subcutaneous disease grew 46.8% between 1990 and 2017." (4)

- "In 2020 [alone], we observed a significant increase in cases of ... psoriasis (1,400%), atopic dermatitis (178%), seborrheic dermatitis (200%), ... and vitiligo (433%)." (2)

WHAT was going on?? There are more products available than ever, and we live in an extremely clean environment (cleaner than ever with the onset of COVID); why are we seeing all of these inflammatory conditions? I, my-

self, was experiencing chronic acne for the first time in my life, which started during college, and I couldn't find anything to actually help me long term. The targeted acne products would give me some improvement for a few days, only to relapse or develop itchy, red skin. It really made me think "there must be something else going on."

"These products aren't addressing the root issues."

2) An unrelenting inner voice

My strong adversity to starting something of my own allowed me to tolerate the fact that there were unmet needs in the market. "Someone smarter and more well informed can figure this out," I thought to myself. This inner voice and the series of events that happened at exactly the right time are what really pushed me to start SIV and made it impossible to answer what truly feels like my calling...

I am not a 'woo-woo' type of person and really don't even know if I believe fully in 'fate;' however, what I can say I believe in is whatever happened with this inner voice. I was driving and thinking (as one does) about my skin concerns, my doctors' patients' skin concerns and I thought to myself "what if I started a skincare company." Upon having this thought, I immediately dismissed it. "The industry is so

saturated, there are thousands of products out there claiming to address every concern under the sun. How would I stand out in a market like that? I don't have any biology or chemistry background. I have no idea where to even start with this." These thoughts rang through my ears for days as I tried to quiet the voice telling me to act on this crazy hare-brained idea. But then, something in-

teresting happened.

As I was making my rounds to my doctors' offices for my current day job, I was listening to a podcast. It was a podcast about the skincare industry, and this particular episode featured Tiffany Masterson, the founder of Drunk Elephant skincare. At the time of the podcast I had never heard of Drunk Elephant or its founder Tiffany, and I certainly did not





realize that hearing her story would change the course of my life.

Tiffany's founder story goes like this: she starts out working as a rep in the skincare industry, becomes extremely interested in skincare after hearing there is a genuine unmet need in the market, starts mixing up products in her kitchen after doing tons of ingredient research, and goes on to start a massively successful company that ultimately makes a \$800 million exit...

I am Tiffany.

Just kidding, but this story really resonated with me for obvious reasons. I really saw myself in Tiffany in that moment. After hearing that, my inner voice practically began screaming at me. "You have to do this. She didn't have a background, just some industry knowledge, a genuine curiosity, and a proven need in the market." The inner voice had a point... Those were the ingredients I had. Turns out- that podcast was the water that this little seed of an idea needed. "FINE," I told the voice. "Let's do it."

So that night I went home and began researching ingredients. I started researching how to mix things, what ingredients worked well together, what was the most compatible with skin, etc.

There was so much that I needed to learn, but I was so energized and lit up, I didn't care. I was ready.

At this point, I did not know exactly what my line would focus around. I knew there was an unmet need in the market that did not effectively address chronic inflammatory skin conditions, but I wasn't sure how to go about solving for that. So, I did what I apparently do best: I dug,



and I researched, and I stumbled onto something incredible: the skin microbiome.

Why the skin microbiome?

The skin microbiome is a collection of organisms that live in and on the skin. The skin microbiota is composed of bacteria, fungi, archaea, viruses, and mites (Demodex) that are

related to the immune system through dialogue with resident dendritic cells resulting from complement activation(1). It is essential for skin health that the skin microbiome is balanced in order for skin to maintain a homeostatic state. Maintaining skin homeostasis is essential.

The microbiota on the skin control many facets of skin health, mainly cutaneous immunity. The immune system is enhanced by the quorum-sensing process between bacterial populations, which can limit the overgrowth of potential pathogens, or by the production of certain antibiotics. (1) Similar to how the gut microbiome controls the body's immune system at large, the skin microbiome controls the skin's immune system.

When the skin bacterium senses a 'threat' or per-

ceived pathogen, an immune response is mounted. The result of this immune response? Inflammation. This means that when we are seeing chronic inflammation, what we are really seeing is an overactive immune system on the skin driven by skin microbiota dysbiosis. In other words, the skin is reacting to all kinds of external triggers that it otherwise should not be reacting to in a normal homeostatic state.

How can this be? We live in a world where we are so pathogen conscious. Naturally I began looking into what can trigger skin microbiome dysbiosis. Well... it turns out- a lot. Some of the most notable:

- Cosmetics- The use of make-up, including foundation and powder, significantly enlarged the community diversity on the forehead skin (Staudinger, 2011).

- Antibiotics- topical antibiotics can alter the resident skin bacteria for several days and implicate a decrease in the commensal *Staphylococcus* spp. population, which is known to compete for colonization with pathogenic *Staphylococcus aureus* (SanMiguel, 2017).

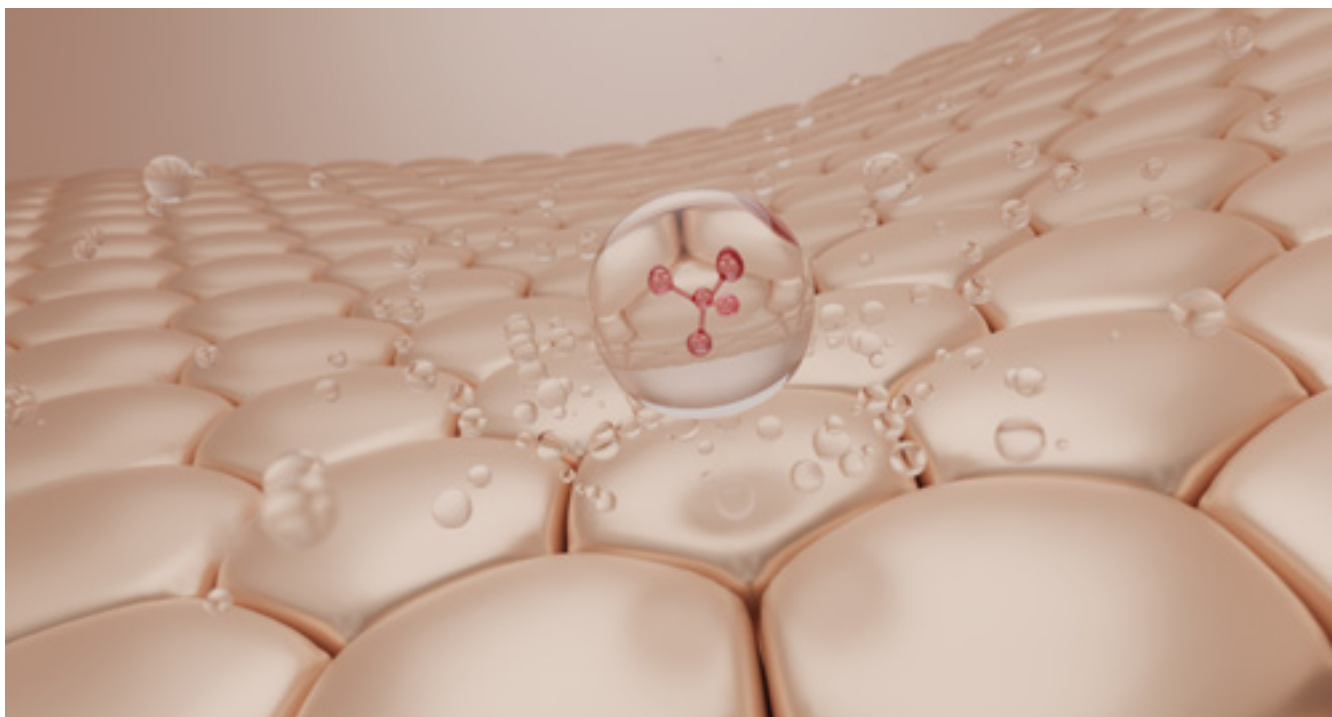
- Pollution- An epidemiological study discovered a direct link between airborne particulate matter (PM) exposure and the occurrence of prominent skin aging signs especially pig-



ment spots, but also wrinkles (Vierkötter, 2010)(5).

Other factors include: extrinsic (such as lifestyle, which embodies occupation, hygiene routine, use of drugs and cosmetics) and intrinsic (genetics, aging, sex, site of the body, etc.) (1)

Interesting.. so it's not all in our heads. Slathering our skin in products that contain preservatives, antibiotics, and other foreign compounds, coupled with this highly 'antibacterial' environment we currently live in are completely disrupting our skin microbiome, throwing our skin out of homeostasis, resulting in more reactivity... i.e. -these chronic inflammatory conditions.



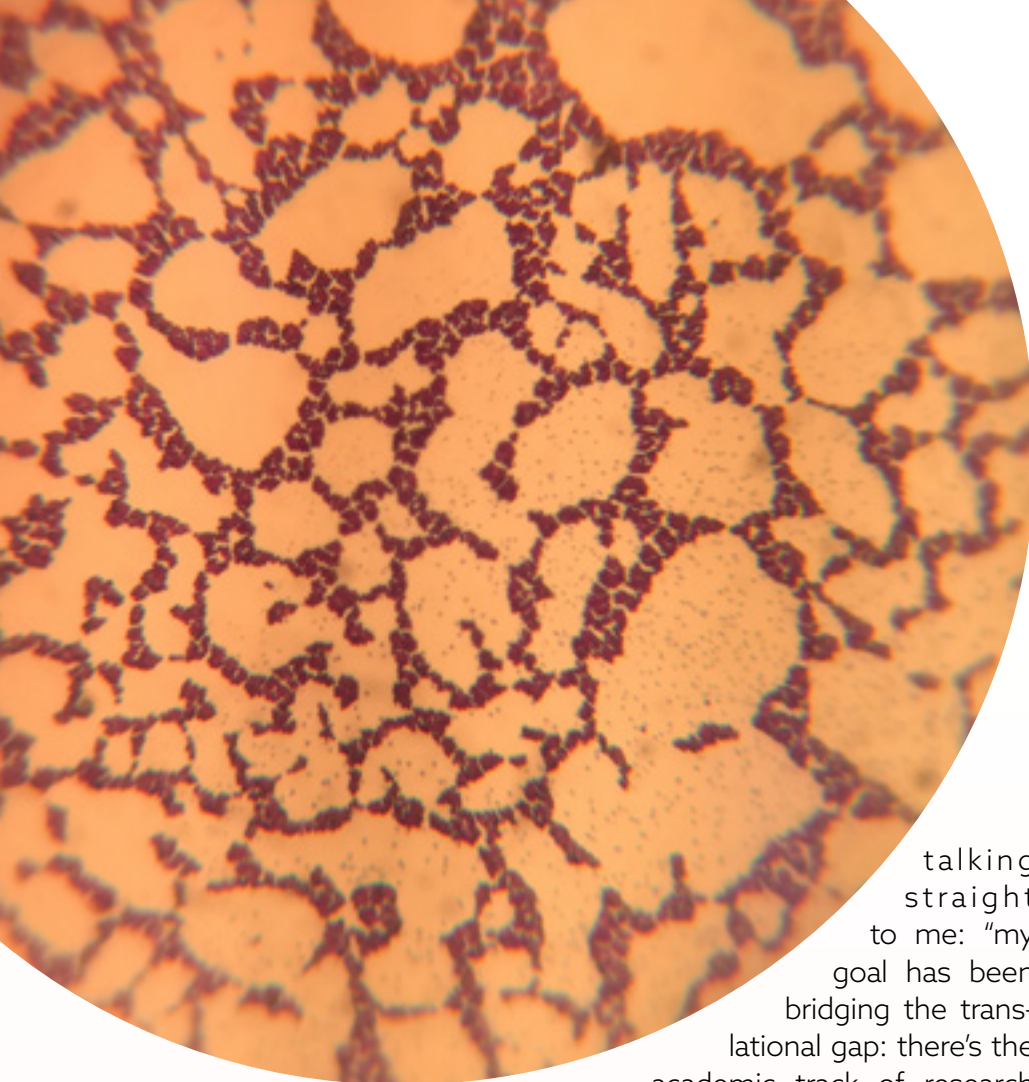
How can I make a product that actually improves the skin microbiome?

After learning about the impacts of the skin microbiome, I thought there had to be some product out there that addresses it; however, I really did not find very many. Just a few here and there that mentioned the inclusion of ferments and lysates. I was mind blown. So I began to dig into how I can make a product that actually influences the skin bacteria.

And as luck (or fate?) would have it, another serendipitous podcast moment happened. I was listening to another podcast talking about the gut microbiome and heard about a new type

of probiotic element called a spore. The spores were taking over the gut microbiome space because of their ability to survive the intestinal tract. Microbiology was booming, especially the gut microbiome space, and that's when I heard world renowned research microbiologist, and co-founder of Microbiome Labs, Kiran Krishnan, explaining the science behind the spore and its unique influence on the gut microbiome.

A spore is a resilient type of bacteria. It lies dormant and doesn't need many nutrients to survive; however, once in the presence of nutrients, it's able to activate and positively influence the microbes around it.



I thought to myself, if these spores can survive the journey to the gut and even survive in the presence of antibiotics, maybe they can survive being in a shelf-stable skincare formula. The biggest problem with skin products that target the skin microbiome is that 'live' bacteria are very difficult to keep alive in a formula. They end up metabolizing the ingredients, changing the formula, and eventually dying due to lack of nutrients and the formula's preservative system. The spores, however, were different.

During this podcast, Kiran made a call-out as if he was

talking straight to me: "my goal has been bridging the translational gap: there's the academic track of research that creates scientific discoveries and then there's the commercial side of things. But between the two there's this massive gap of information where rarely are the things being studied in the academic world ever translated to products that will actually impact people. It takes a unique person or company. Somebody has to notice what's missing, understand the science, and then be able to translate it into a product that betters the population... looking for these opportunities has become a big passion of mine." (3) At the end of this podcast, Kiran made a nod to his Instagram handle and encouraged people listening to reach out.

After hearing this podcast, the inner voice came back with a vengeance: "REACH OUT." So I did... Four Instagram DM's later, I had a phone call set up with Kiran that once again changed my life.

During the course of our brief, but impactful, phone call, I told him my idea of using the spores in a skincare formula and that I saw a huge gap in the market that effectively addressed the rampant skin microbiome dysbiosis that was plaguing us. I told him that I thought the spores would be able to work similar to how they work in the gut and that their unique ability to survive in challenging environments made them the perfect quorum-sensing component to a skincare product. I told him how I wanted to be the bridge between the academic and the commercial world.

Kiran, being one of the most brilliant people I know (seriously) was intrigued and confirmed that my idea was not actually crazy. This could work- so he generously offered to send me some spores to begin formulating with and told me to stay in touch with updates and progress. So, after receiving the spores, I did just that. For a year and a half, I formulated my little heart out and finally landed upon a working prototype. At that point, I enlisted the help of some of my friends who had acne and eczema (thanks guys) to be my test subjects, along with my-

self, and waited... the results were incredible! We knew we were onto something good.

The rest...

is soon to be written. Since then, we have grown leaps and bounds but we are really just getting started. Starting on this ~journey~ has been the greatest joy of my life. It sounds cheesy but it's true. Building something from scratch has been the most rewarding experience, and seeing it all come to fruition is a feeling I can't even describe- not to mention the impact we are able to have on people's lives. It's challenged me to grow in areas I didn't even know existed, especially coming from someone who always swore entrepreneurship was not for her. Turns out, it was exactly what I needed in my life. My passion was there all along, it just needed to be found. So, I guess my takeaway is we don't always know what we need or want in life; but

maybe on some level we do? So, listen to that inner voice, even if you think she might be a little crazy. It only takes one idea, one connection, one DM, one podcast, one whisper, or one screaming, unrelenting inner voice to change your life.

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Isabel Vitale



is the founder and CEO of SIV, a cutting-edge skincare company dedicated to harnessing the power of biology to create resilient skin. With an unwavering commitment to revolutionize the skincare industry, Isabel's journey has been marked by a relentless pursuit of innovation and research. Isabel's passion for skincare and her innovative spirit were honed at DePaul University, where she graduated with a degree in Public Relations and Advertising. Her education equipped her with a deep understanding of communication and consumer behavior, skills that have proven invaluable in the marketing and branding of SIV's groundbreaking product. As a leader and advocate for the marriage of science and personalization, Isabel is at the forefront of the skincare industry, guiding individuals toward a path of radiance and resilience.

[@sivcare](https://www.instagram.com/sivcare)

REVOLUTIONIZING HEALTH AND WELLNESS:



SUSAN SHAFFER
& ABBY ABOITIZ

The Power of
Nitric Oxide and
AI Technology

In an era where the quest for longevity and improved health is paramount, two visionary women, Susan Schafer and Abby, are spearheading a movement that promises to change the way we approach healthcare and wellness. With a focus on nitric oxide and cutting-edge AI technology, they are reshaping the landscape of health education, diagnosis, and patient care. This interview with Jean Fallacara, dives deep into their personal journeys, the development of their innovative solutions, and their unwavering commitment to empower individuals for better health outcomes.



Meet the Visionaries

Susan Shaffer, the Co-founder and President of multiple nitric oxide-centric companies, has made it her mission to educate the masses about the incredible benefits of nitric oxide and promote longevity as we age.

Abby, the founder of AI Wellness, aims to bridge the gap between healthcare, wellness, and technology. Her goal is to provide education and a seamless continuum of care through AI-driven solutions.

A Shared Vision for a Healthier World

At the core of Susan and Abby's endeavors is a shared vision: to connect, create, and make a positive impact on humanity's health and well-being. They recognize that collaboration between different domains is key to achieving this goal.

Susan emphasizes that bringing communities together, aligning strengths, and dis-

seminating knowledge in a powerful way is essential to empower individuals in their pursuit of better health. Abby adds that in today's information-rich world, it's easy to get overwhelmed by choices and misinformation, making AI's role in curating trusted platforms crucial.

"There are so many options out there. And to be able to have it under one roof that's been vetted and trusted and validated, now the end user will be able to come in and see this and navigate according to what they need with this assistance." - Susan

"If you think about what is going on out there, and the reason for the chaos, it is because we never try to think to ask the right question. So when you ask the right questions and ask the right people to collaborate and come together who truly care, that's where we get to this answer." - Abby



The Challenge of Navigating the Healthcare Landscape

The interview touches on the complexity of the healthcare system and the challenges individuals face when seeking the right care. Abby draws on her personal experience surviving cancer to highlight the importance of asking the right questions and being informed about one's health options.

Susan shares a similar sentiment, recounting her journey of advocating for her father's health when traditional medicine failed to provide adequate solutions. Both experiences underscore the need for informed choices and alternative approaches to healthcare.

The Role of AI in Healthcare

Abby delves into the potential of AI in healthcare. She emphasizes the importance of automating processes to streamline patient care, starting with practice management systems and questionnaires. AI can provide continuity of care, personalized recommendations, and data analysis to enhance patient outcomes.

"The old doctors in villages like 50 years ago were taking time to listen to the psychology of the person and the diagnostic was not even the most relevant thing that they were doing. It was a subsequent issue or finding that they have by listening. Today it's three minutes. Do you think that AI will help diagnostics and give options?" - Abby

The conversation explores how AI can assist doctors in optimizing their efficiency, allowing more time for personalized care and better patient-doctor interactions.

A Personal Story of Triumph Over Cancer

Abby shares her inspiring journey of surviving cancer through innovative treatments. She credits her recovery to a combination of cutting-edge technology, including Microcurrent Technology, cleanses, and supplements.

"So I survived cancer, eight years ago. I spent a lot of time researching into the healthcare industry. I've been in the industry for 15 years. I've seen the good, the bad, ugly, the nastiest in healthcare, So I have a lot of companies in the healthcare space." - Abby

The Impact of AI and Nitric Oxide on Health

Susan explains the importance of nitric oxide in maintaining optimal health and how her products, developed over 13 years by Dr. Bryan, can help individuals improve their nitric oxide levels.

Abby highlights how AI technology can track and analyze trends, helping patients and healthcare providers monitor and manage chronic diseases effectively.

The interview reveals the synergy between Susan's nitric oxide solutions and Abby's AI-driven healthcare platform. Together, they offer a comprehensive approach to wellness, providing data-driven insights and science-based products to empower individuals on their health journeys.



Overcoming Resistance and Criticism

As with any groundbreaking innovation, Susan and Abby acknowledge that they may face resistance and criticism. However, they remain committed to their vision and plan to protect their circle of trusted partners and collaborators. They hope that AI adoption will accelerate and be utilized for the betterment of healthcare.

“My energy is so limited and I choose not to let that take me down. Now I’m aware and it brings up caution for me, and I am selective about my choices, connections, partnerships, and collaborations. We will protect our circle.”
-Susan

Conclusion

In a world inundated with health information and choices, Susan Schafer and Abby are beacons of hope. Their unwavering commitment to education, collaboration, and innovation in the fields of nitric oxide and AI technology promises to revolutionize the way we approach health and wellness. As they continue to connect, create, and make a lasting impact, they invite us all to join them on this exciting journey toward a healthier and more vibrant future.



Susan Kim Shaffer

Is a dynamic force in the nitric oxide industry, serving as the Co-Founder and President of Pneuma Nitric Oxide, Nitric Oxide Innovations LLC, Bryan Nitricuticals, LLC, and Bryan Therapeutics, Inc. Susan is widely revered as a thought leader in health & skincare science, and her influence extends across the industry, marking her as a trailblazer shaping the forefront of nitric oxide innovations.

Susan brings a warm and confident presence to her role, combining a passion for science-based solutions within health & skincare with an unwavering dedication to empowering others. She diligently works to share insights, educate, and elevate awareness about the profound impact of nitric oxide in the realms of health, wellness, and skincare. In addition to her multifaceted roles as a Co-Founder and President, Susan sits on several influential boards, contributing her strategic acumen to further enhance the impact and direction of diverse organizations within and beyond the health industry.

[@n1o1.by.pneuma.nitric.oxide](https://twitter.com/n1o1.by.pneuma.nitric.oxide)

Abby Aboitiz



Abby Aboitiz, a seasoned entrepreneur and dedicated philanthropist, is widely recognized for her exceptional accomplishments. With a strategic vision and an unwavering commitment to excellence, Abby consistently demonstrates her ability to set ambitious goals and deliver extraordinary results.

What distinguishes Abby is her remarkable capacity to unite industry leaders behind her visionary pursuits—a mission to revolutionize healthcare and empower individuals to take charge of their well-being. Her extensive interests encompass healthcare, fitness, beauty, medtech, and logistics, with a global business presence spanning 92 countries.

Abby's role as the founder of AI Wellness, 247 Health Solution, Apex Digital Health, Sensights AI, and Complete Circle of Care & Markitech underscores her commitment to navigating the ever-evolving healthcare landscape. Her primary objective is to equip aging communities with the tools needed to proactively manage their health.

[@abbyaboitiz](https://twitter.com/abbyaboitiz)

OVERCOME HOLIDAY CHAOS:

Mastering Thrive
State for Optimal
Performance and
Longevity

DR. KIEN VU



As the curtains draw to a close on another year, the festive season emerges, draped in its celebratory splendor. Yet beneath its sparkling facade often lies a shadowy underbelly of stress and worry. From the financial toll of gift exchanges and festivities to the emotional labyrinth of family reunions and social commitments, this joyous season can paradoxically morph into a grueling test of our mental and physical resilience. Left unchecked, these stressors stealthily hasten our aging and erode our health, overshadowing a time that should brim with vitality and joy.

****Unraveling the Holiday Stress Spectrum****

Monetary strains are a notable stress catalyst during the holidays. Societal expectations to lavish gifts, host or attend myriad social gatherings, and possibly travel to see loved ones can cumulate into a daunting financial burden. This economic strain, fused with the quest for a flawless holiday experience, can escalate stress hormones like cortisol, undermining our mental and physical well-being.

Furthermore, relationship dynamics intensify during the holidays. Family get-togethers, though often heartwarming, can also resurface old grievances and reignite dormant tensions. For those grappling with loss or strained relationships, the holidays can magnify feelings of isolation and sorrow.

Moreover, the holiday season disrupts our daily rhythms—our dietary habits, exercise routines, and sleep patterns often yield to the lure of indulgence and festivity. Such disruptions can impair our physical health and intensify feelings of stress and anxiety.

****The Toll of Unbridled Stress: Hastened Aging and Health Deterioration****

The holiday season, rife with various stressors, can trigger a state of chronic stress with profound implications for our health and aging trajectory. When we falter in managing these stressors, our body's stress response system is persistently activated, unleashing a series of physiological reactions that can culminate in long-term harm.

At the center of the stress response is the hypothalamic-pituitary-adrenal (HPA) axis, a sophisticated network of glands, hormones, and brain regions that orchestrates our body's reaction to stress. Chronic HPA axis activation can sustain elevated cortisol levels, linked to myriad health issues. Prolonged cortisol exposure has been tied to increased inflammation, a pivotal factor in numerous diseases and a key aging accelerator.

Inflammation, in the context of stress, is particularly pernicious. While acute inflammation is a beneficial physiological response to harm or infection, chronic inflammation, fueled by ongoing stress, can damage healthy cells and tissues. This low-grade, persistent inflammation—"inflammaging"—is a



notable risk factor for various age-related ailments, including heart disease, diabetes, cancer, and neurodegenerative disorders.

Additionally, the immune system, our sentinel against pathogens, is compromised under chronic stress. Stress can diminish the immune system's efficacy, heightening vulnerability to infections and impeding the healing process.

Another critical facet of chronic stress is its impact on blood pressure. Stress can provoke temporary blood pressure spikes, and when stress is incessant, this can lead to sustained high blood pressure, or hypertension. Hypertension is a principal risk factor

for heart disease and stroke, among the leading causes of death worldwide.

Our body's metabolic processes are also ravaged by stress. Chronic stress is implicated in the onset of metabolic syndrome, a constellation of conditions including increased blood pressure, elevated blood sugar, excess abdominal fat, and abnormal cholesterol or triglyceride levels. Metabolic syndrome significantly escalates the risk of heart disease, stroke, and diabetes.

Moreover, emerging evidence suggests that chronic stress affects our DNA's very structure. Telomeres, the protective caps at the end of our chromosomes, shorten with

each cell division, and their length is a cellular aging indicator. Stress has been shown to accelerate telomere shortening, hastening the aging process at a cellular level.

Collectively, these physiological alterations not only expedite the aging process but also diminish our life quality. The cumulative effect of heightened inflammation, a compromised immune system, elevated blood pressure, disrupted metabolic processes, and accelerated cellular aging renders us more susceptible to a broad spectrum of age-related diseases, emphasizing the imperative need to adeptly manage stress, particularly during the potentially tumultuous holiday season.



****The Remedy: Nurturing Thrive State****

Amidst the multifaceted holiday stressors, there lies a beacon of hope: the concept of Thrive State. The Thrive State epitomizes the zenith of vitality where our body, mind, and spirit are synchronized and perform at their peak. Attaining this state empowers us to adeptly navigate stress, excel in our endeavors, and decelerate the aging process.

To nurture Thrive State, self-awareness is foundational. Recognizing stress indicators and implementing effective coping strategies is vital. Practices like mindfulness, meditation, and deep breathing can substantially alleviate stress, reinstating tranquility and control.

Physical well-being is also a Thrive State cornerstone. Upholding regular exercise, even amidst holiday pandemonium, counters stress hormones and spurs endorphin production, uplifting mood and overall health. Nutrition is pivotal as well. Amidst festive indulgences, it's crucial to balance treats with an anti-inflammatory diet to offset stress's adverse effects.

Quality sleep is another Thrive State pillar. Crafting a calming pre-sleep routine and fostering a restful environment can significantly enhance sleep quality, fortifying our resilience to stress.

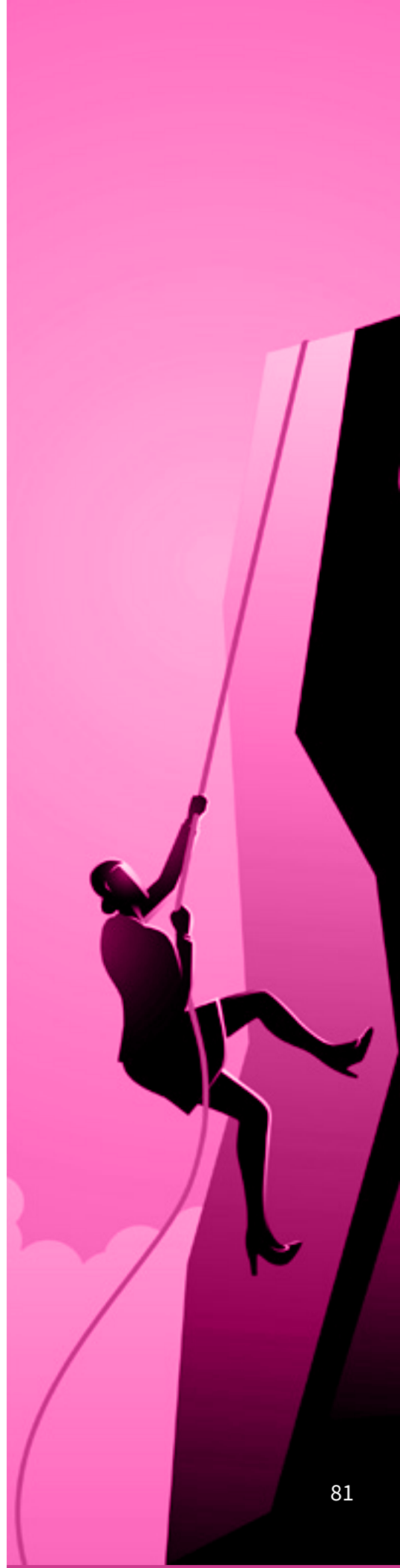
Nurturing Mental Health: The Key to a Thriving Life

In the midst of life's challenges, both expected and unexpected, it's crucial to recognize the profound impact of mental health on every facet of our existence. From our relationships and professional pursuits to our physical well-being and our overall quality of life, the state of our mental health is a defining factor.

In today's world, where stressors can accumulate like snowflakes in a blizzard, taking a toll on our emotional well-being, it's easy to feel overwhelmed. The holiday season, in particular, can magnify these stressors, making it essential to prioritize mental health during this time.

Why is mental health so vital? Because it influences our decision-making, our interactions with others, and even our physical health. When we're in a good mental space, we're better equipped to handle challenges, make sound choices, and nurture meaningful connections with loved ones. Conversely, poor mental health can erode these abilities and lead to a downward spiral in various aspects of our lives.

Yet, amidst the trials and tribulations, it's essential to remember that there is hope. Resources are available to help individuals bolster their mental well-being. Simple practices, like mindfulness and deep breathing, can be powerful tools for managing stress and promoting mental resilience.



There are a wealth of free resources throughout the web including my own platforms which has help countless of individuals and organizations create sustainable mental and emotional wellness routines. Seeking support from professionals or engaging in therapy can also be transformative.

I've spent years delving into the intricate connection between mental health, physical well-being, and peak performance. My mission is to offer insights and resources that

empower individuals to thrive in all aspects of life. Through the lens of my experiences and expertise, I've witnessed the remarkable transformation that occurs when people prioritize their mental health.

In every challenge we face, there is an opportunity for growth and resilience. By nurturing our mental well-being, we can navigate life's twists and turns with grace and emerge stronger on the other side. Remember, you're not alone on this journey, and there are

countless resources available to support you.

As you reflect on the importance of mental health in your life, know that there is a path to a thriving existence. It begins with a commitment to self-care and a willingness to seek the help and resources you need. With each step you take toward nurturing your mental health, you move closer to a life filled with vitality, purpose, and joy.



**Kien
VUU, MD**

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Longevity Doctor, Podcast Host, Bestselling Author, Host of Thrive State Summit

Dr. Kien Vuu is one of the most sought-after anti-aging physicians in the country. At his VuuMD Longevity and Performance Clinic, Dr. Vuu regularly works with celebrities, top corporate executives, and high-functioning professionals to optimize their health, performance, and vitality.

He's also a trusted media personality, offering health and medical insight to top-tier outlets such as Forbes and Fast Company, and appearing on national television shows such as The Doctors, Access Hollywood, and more. Dr. Vuu dedicated years to training the next generation of physicians with tenures at the National Institutes of Health, Howard Hughes Medical Institute, and UCLA.

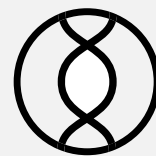
As someone who has overcome two chronic diseases himself, Dr. Vuu is passionate about empowering people to reclaim their health and live with fulfillment, abundance, and purpose through his bestselling book, Thrive State, top-rated podcast, and online resources including his upcoming Thrive State Summit, where he'll be hosting 50+ of the most iconic transformational leaders of our time will show you how to live life stress-free and to the fullest. Join the Thrive State Summit FREE & ONLINE from February 1st-4th.
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SENSUAL SUCCESS

Biohacking Your Sexuality -
To Enhance Creativity

Drs Wendy & Steve McGough

Have you read “Think and Grow Rich”? With over 100 million sold, it’s one of the best selling personal success books in the world.(1)

Why did its author Napoleon Hill say that sexual energy - when channeled towards goals - was the most important factor for both personal and business growth?

Or on a more fundamental level, have you ever wondered how two people can be in the same situation, but one person only sees risk, while the other creates an opportunity out of it that transforms their life?

Here you’ll learn why some people seem to naturally find creative solutions, plus the drive to stay with it.

Harnessing our sexuality for creativity and motivation isn’t the only way to achieve success. But it is one of the most powerful ways, and is fundamental to the human experience.

If you’re familiar with many popular motivation and self help programs, odds are you’ve heard of the reticular activating system (RAS), and how it can help you achieve goals. Various studies support this belief. The RAS is a complex network of neurons originating in the brainstem. It acts as a filter for the vast amount of sensory information that the brain receives, allowing the brain to focus on what it has subconsciously defined as most relevant or important at any given moment. This data filtering process can increase - or decrease - the odds of you achieving your goals, depending on what your RAS focuses on. (2)



However, one thing that isn’t often mentioned in mainstream self help programs is that the RAS is highly attuned to noticing anything sexual. In fact, sexual desire, arousal, and orgasm are directly controlled via the RAS. Later we’ll explain how to use this for your goals. (3)

Our limbic system, which plays a major role in our emotions and motivation, is also heavily involved in sexual response. (4)

You’re about to discover, from a neuroscience standpoint, why sexual drive (and the related feelings and emotions) can be one of the most powerful ways to increase creativity and motivation. Then you’ll learn ways to Biohack your sexuality to increase this focus.

This article comes from insights I’ve learned from over 40 years of Eastern sexual practices. Plus exploration in the 90’s when I worked in neuroscience research at Wake Forest School of Medicine.

Of course, you may wonder how this can benefit you in a tangible way.

For me, it has helped with inspiration and motivation for many areas. These include being granted 6 US / International patents, writing multiple books and solving the challenges in 4 startups. Our latest startup, Women and Couples Wellness, LLC received angel investment at a \$5M valuation after a successful crowdfunding. We’re now on our 4th mass production from China.



Of course this didn't just "manifest" - like some groups claim can happen. I'm not saying that isn't possible. But for me, it took a great deal of work and surviving many very painful setbacks.

These techniques helped with being able to look at challenges in a new way - and have the motivation to keep going when just about everything was going wrong. I'm not saying this to brag, but to hopefully motivate you to really think about these techniques.

As well, my wife Wendy and I have a very different perspective on research in sexuality, which influenced the method here. Through our work, we've been able to observe and talk with a multitude of women in real time as they achieved orgasm. Being able to observe and talk with them during this process has given us insights you can't get from surveys. While this likely sounds crazy, if you look up our backgrounds you'll understand.

So, here's what you're about to learn:

What did Napoleon Hill say about sexuality, and why is it important?

So if you're "transmuting" sex drive - what are you really doing?

What is the association between sexuality and creativity from a neuroscience perspective?

What are specific techniques you can follow to harness this energy?

What did Napoleon Hill say about sexuality, and why is it important?

Napoleon Hill spent 25 years interviewing some of the most successful people in the world to write "Think and Grow Rich".

Think and Grow Rich was published in 1937, when times were much more conservative regarding sexuality. Even though it was dangerously controversial, Hill devoted an entire chapter on "Sex Transmutation" because he thought the topic was so important. (5)

However, Hill was intentionally vague in the book about the actual application. Over the years I've reflected what he said in light of what I learned in sexology research, and working with couples.

Napoleon Hill's views on sexuality can be summarized as follows:

1. Sexual Energy as a Creative Force: He believed that sexual energy is one of the most powerful forces within an individual. He saw it as a form of creative energy that could be harnessed and redirected toward achieving success in business and other life goals.

2. Transmutation of Sexual Energy: He argued that individuals could achieve higher levels of motivation and success by transmuting (or I say focusing) their sexual desires and energy into more productive and creative endeavors.

3. Burning Desire: He believed that by channeling sexual energy into this intense desire,

individuals could overcome obstacles, stay focused, and work persistently toward their objectives.

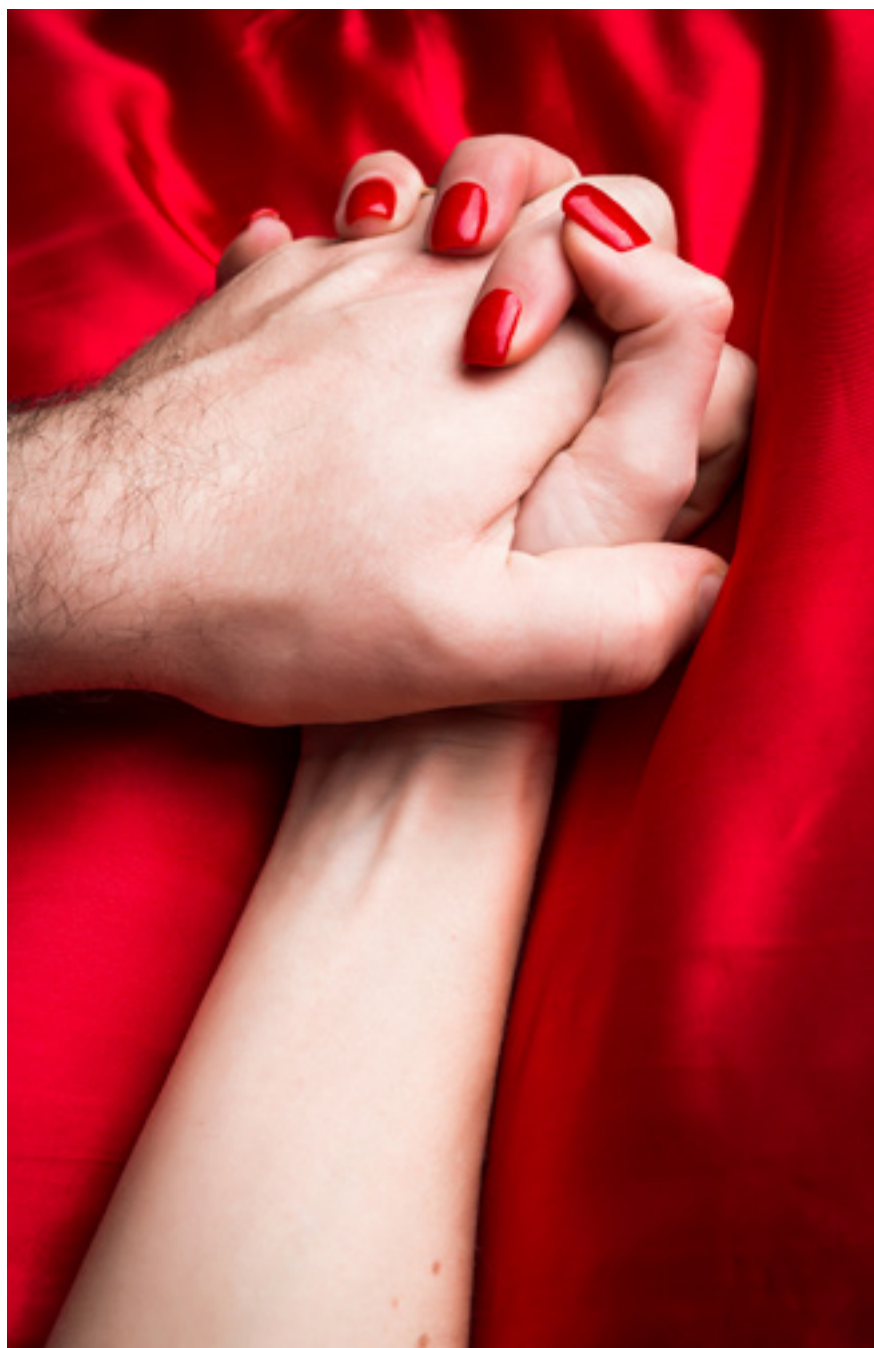
4. Subconscious Influence: Hill proposed that sexual energy had a significant impact on an individual's subconscious mind.

5. Balanced Lifestyle: Hill also emphasized the importance of maintaining a balanced and harmonious life, including your sexual life. He advised against promiscuity and suggested that a balanced and healthy sexual life

could contribute to overall well-being and success.

Hill's views on transmuting sexual energy for business success reflect his belief in the transformative power of strong desire and focus. As mentioned, while his ideas were considered extremely controversial in his time, they have had a lasting influence on the self-help and business development literature.

Napoleon Hill's writing about sexuality seems to have caused a great deal of confusion though.



So if you're "transmuting" sex drive - what are you really doing?

For this discussion I'm going to define 'transmuting your sex drive' as a way to refocus the motivations that compel you to want to express yourself sexually.

So, instead of just focusing on just the sexual experience, you associate that drive at an almost subconscious level with achieving your goal.

Throughout history, artists, writers, musicians and other creative people have described how a 'Muse' would inspire them. In this case their sexual interest in the muse, or winning the affection of their muse would motivate them to be creative, work diligently, and likely take risks. (6)

What if you could create your own 'Muse'?

The goal is to activate your RAS to notice new opportunities and solutions that are needed for your goals. Plus, align core beliefs in your limbic system so you have confidence and motivation to follow through. (7)

Even though you may have limiting beliefs from the past that normally would trip you up, your limbic system is also wired to prioritize seeking sex. We just have to train it. (8)

If you can do this with a partner and share the experience it's orders of magnitude more powerful. When you do this, especially over time, odds are you'll find you notice opportunities that you overlooked before.

Now from a Taoist Yoga or Tantric standpoint, there's a LOT more going on. Cover-

ing that is more of a 'book' than an article. As well, some things have to be experienced to understand.

But to give an idea of one Taoist Yoga technique, you imagine the feeling of 'pulling' the 'sexual sensation' from your pelvic area up your spine, etc. One of these goals is to convert that 'horny' feeling into a more creative expansive feeling as it travels up your spine to your head. The Taoist method I trained in, then (usually) circulates this 'new feeling' back down the front of your body. (9) The Tantric / Neo-Tantric practices have a multitude of variations of this.

That being said, some people can learn these practices by intuitively 'feeling' the experience. But I've found that this isn't the case for people who are more analytical thinkers.

As far as my background with this, I began studying Tai Chi at 8. My first teacher was Dr. Kathy Walker, and during the summers Marshall Ho'o. (10)

When I was 13, I was introduced to Mantak Chia's methods for Taoist sexual yoga. I've studied Mantak Chia ever since. (11) (12)

But I didn't actually "feel" any tangible sensation for years. It wasn't until I was in a relationship in my mid 20's with a wonderful grad student from Hong Kong who practiced Taoist Yoga. With her I finally had an "ah ha" moment that transformed my view of this practice.

Later, over the years I've been very fortunate to also study un-





der Master Chunyi Lin (13), and Grandmaster Dr. Jimong Choe, and others. (14)

The key point here is that for many, learning these more exotic techniques are very experiential. You have to physically feel the sensation to know what it is. Without feeling it, it's theory.

It's kind of like learning to wiggle your ears. Once you 'feel' the sensation of contracting the specific muscle needed, you can do it - after you've practiced a few times. But it's difficult to explain how in writing.

Wendy and I periodically teach courses in Taoist Yoga, but we call it 'Tantra for Engineers'. (15)

What is the association between sexuality and creativity from a neuroscience perspective?

Before we explore expanding awareness, we need to understand how chronic stress kills our creativity.

A study found that farmers scored an average of 13 points lower on an IQ test when they felt like they barely had enough resources. But later their score returned to normal IQ after harvest and they sold their crops. (16)

The conclusion was that it requires so much mental energy from stress and worry related to not having enough resources, that it reduces the chances of people noticing opportunities that could improve their situation. When under stress, their performance was dra-

matically reduced on cognitive tasks in general. (16)

Studies have also found anxiety in general tends to impact performance on tests for college students. (17)

To complicate things, studies have found that people with higher IQ tend to also be more likely to feel stress and anxiety. (18)

On the brighter side, multiple studies have shown that being happier increases work performance. In the later study, some employees were simply shown an amusing video before they began work. This resulted over time in a 12% increase in productivity. (19)

So if chronic stress reduces our ability to think and be productive, while being happy can help, what do the studies say about sexuality?

First, numerous studies have found that regular sexual activity can dramatically reduce stress and anxiety. One study found anxiety and depression scores were significantly lower in subjects sexually active during lockdown. (20)

Plus a group study found that in positive relationships, regular sex was a very effective way to reduce daily stress. (21)

Interestingly, another study found that women appeared to use sex as a way to reduce stress, and were more likely to seek out intercourse more frequently during times they reported being stressed. (22)

One very intriguing study helps give insights into Napoleon Hill's views on sexuality

The study found that when people fantasized about being with someone they really loved, their ability to think creatively increased significantly. However after people fantasized about something highly sexual with a stranger or erotic fantasy, their ability to think analytically increased dramatically. (23)

Studies have also found that people, particularly men, are much better at recognizing the emotions and facial expressions of other people after they have seen a photo of someone they deeply love. So focusing on the feeling of love clearly alters the mental state in a way that makes them better suited to interact and communicate with others. (24)

It's also been consistently found that when our levels of Oxytocin are elevated, creativity is enhanced. (25) Sex, and particularly the orgasmic state, is able to consistently both release a flood of oxytocin, while reducing the stress hormone cortisol.

According to research in 2011 from Ohio State University, on average younger men think about sex 19 times per day. While younger women think about sex 11 times per day. These thoughts are more frequent than food and other needs. For instance, in the study men reported thinking about food on average 18 times per day. (26)

In his book "Atomic Habits" James Clear mentioned the concept of 'Habit Stacking'. Here you take habit (ie. an activity you already do automatically) and then condition yourself for this to trigger a new activity you want. This makes it easier to integrate the new behavior into your life. (27)

What if you 'Habit Stacked' those times you thought about sex, to subconsciously look for opportunities? Could it increase the chances of you noticing possibilities you might have missed before? Particularly since our RAS tends to prioritize finding patterns when they are associated with sex.

How does sex and orgasm impact our mindset?

While stress can make orgasm more challenging for many women, and to a smaller degree men, if they can achieve orgasm it appears to 'reset' and then activate many areas of the brain that are associated with being in an optimal and 'safe' state. (28)

Another study found that in older adults, age 50-83, having more frequent sexual activity was associated with better performance both in visual analysis and communication. (29)

So based on the above it seems sexual drive, fantasies, and experiences have the potential to enhance our ability to think and be creative. The key is you need to harness this natural drive and use it to compel your mind to find solutions for your goals.



What are specific techniques you can follow to harness this energy?

If you think about it, our conscious mind processes reality through words, images, sounds, taste, smell and physical sensations. However, our limbic system processes data and communicates to our higher mental centers through EMOTIONAL FEELINGS. (30)

The goal here is to get your RAS and your limbic system on the same page as your goals. Please note that I'm referencing them separately, however they are closely connected and make up what we often refer to as the subconscious mind. (31)

What you're doing is creating a clear vision that focuses on the FEELING you'll have AFTER achieving your goal. With that FEELING you then add a sexual fantasy that REALLY excites you.

Focusing on your vision is to help clarify things to your conscious awareness. Then focusing on the FEELING, communicates to your limbic system, RAS, and other aspects of your subconscious mind that this has ALREADY happened.

By imagining it already having happened, the goal is for your subconscious mind to NOT find anything new, risky, or dangerous about it. That way, hopefully these aspects of your subconscious mind will accept it as safe, familiar, and easy. Then by associating this vision and FEELING with a highly exciting sexual experience, you're giving it something it's hard-wired to seek out.



Many authors in the metaphysical space, such as Neville Goddard describe how the FEELING is the most important aspect in affecting personal change when we visualize. My belief is, as just mentioned, it is because we're working with our limbic system, instead of against it. Now there may be a lot more going on metaphysically, etc., but that's beyond the scope of this article. (32)

That being said, my experience has consistently been that this process will increase the chances of you noticing opportunities each day, AND have positive emotions and feelings to help support your actions.

For example, imagine you're pitching your business to a group of investors to raise money. How would you perform if you were utterly terrified? Would you be able to remember your pitch and then answer hard questions, where you really had to think on your feet?

Compare that to you feeling totally confident, plus not even needing their investment? What if you were both confident, didn't need the investment, and simply by going through the motions here would guarantee you a night of your fantasies later?

In the first case, while mentally you were prepared and

really wanted to do well, if your limbic system thought this situation meant danger, odds are it's going to wreck your performance. Plus you may not notice an opportunity from a conversation that if you'd been more confident you wouldn't miss. But in the second case, you can respond naturally, in a relaxed way.

Which would you prefer?

Again, the goal here is to convince your limbic system and RAS that whatever it is you want has already happened, and went well. Equally important, you'll get sex whenever it happens again. So there's no need to hold you back or limit you in any way. In fact it needs to point out EVERY possible way you can achieve it, while giving you the motivation and confidence to do it.

There are many ways you can apply this process, but unfortunately that's beyond the scope of this article.

Beyond this, a large part of these practices explore ways to synchronize you and your partner's natural rhythm. When you do this you can both feel a profoundly deeper connection. As well as open new worlds of experiences together. When you share a goal, the more deeply you connect with your partner, the more amazing and powerful this process becomes.

Hopefully this gave you some insights on one way to apply this often confusing topic.

Also, feel free to contact me if you have any questions.

Drs Wendy & Steve McGough



Wendy & Steve are the founders of Women & Couples Wellness. Over the past 12 years, they've worked with several thousand women and couples facing challenges ranging from pelvic health to intimacy to fertility. They hold doctorates in human sexuality from the IASHS, focusing on clinical sexology. Wendy's background is in psychology from Ohio State, while Steve's background includes a BS in nutritional biochemistry at UNC-Chapel Hill & neuroscience research at Wake Forest School of Medicine. They're the creators of the hi® massage system & hold 6 US/Int Patents for women's pelvic health solutions. They work closely with urologists, pelvic floor physical therapists & fertility specialists.

<https://www.himassager.com>
<https://www.himassager.net/3step>
<https://www.biohackingbliss.com>

Notes:

- (1) <https://www.naphill.org/shop/books/paperback/think-and-grow-rich/>
- (2) <https://www.ncbi.nlm.nih.gov/books/NBK549835/>
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What is the most effective way to extend your lifespan?

Longevity is currently a buzzword in the scientific community. However, it is a male dominated industry. Yet if a woman goes through menopause five years later than average, she will live an extra 11 years. There is no equivalency in this area for men, yet it is totally overlooked about how effective this can be for women.

Some interesting facts:

Men live longer than women when they are superannuated (over 105), women also live less long when they are married as opposed to men. Why is this? Many theories abound, our conclusion however is that due to the convergence of work and home culture where women are expected to be champions both in the home and at the office, they suffer additional stress compared to their male counterparts. Why is it that society still generally considers women to be the primary carer for the family in the home?

Since 1980 life expectancy has risen from 70 to 78 years, an increase of 12%, with it likely continuing to increase throughout this century, with average lifespans approaching 110 years being very realistic. However, in the last two years this has dropped by an average of three years in the United States. Even taking into consideration the COVID-19 pandemic, there are still underlying issues that have not

been fully addressed. Lifestyle and environmental issues have significant effects that create unintended consequences. One of these issues is the decreased global fertility rate in women and men that is occurring, especially in industrialized countries.

Modern medicine is generally designed around treating a problem that arises rather than addressing the root cause. This 'band aid' approach is effective at fixing issues in isolation, but when there are numerous problems the 'whack a mole' approach for curing ailments becomes inadequate and sometimes even perilous.

Ageing is a condition that has several areas of degeneration at the same time, so addressing one issue at a time does not work effectively in this area. In order to tackle the issues of aging one has to look at a systemic approach. We believe that one of the best systemic areas to address

these issues is the endocrine system, which manages eight crucial areas of the body ranging from sleep, appetite and blood pressure to metabolism, growth and sexual function and reproduction. It stands to reason that if these systems could be managed effectively, they would keep a human being more youthful. Humans are, by definition, a sexually reproductive organism which means that they differentiate into opposing sexes so that they can share their genetic material in meiotic reproduction, and it is the functions of the endocrine system that allow us to perform these tasks effectively. Dense bones, supple skin, mental acuity, cellular hydration and powers of recuperation are all traits that are required in order for an individual organism to pass on it's genes to a new generation. The byproduct of these functions are the characteristics that we define as youthful.



ETERNAL YOUTH: OVARIAN INSIGHTS

The Pivotal Role of Ovarian
Rejuvenation in Longevity

Zack Varkaris



Therefore, on that premise a functioning reproductive system combined with aesthetic maintenance is the foundation for a fully extended life. In 2011 when we first investigated the longevity arena, there were many interventions and procedures being touted, most of these involved expensive protocols and hard to find scientific discoveries. Having functioning fertility organs addressed many of the aging factors with one hit. Aesthetic management is an add-on, since skin, hair and nails are follicular organs, like ovaries and testes, and therefore behave in a similar way using our interventions. However, it had more of an effect that we initially understood.

There is a set of procedures that involve extracting autologous mesenchymal stem cells, centrifuging the extract

into a concentrate and then adding exosomes from platelet poor plasma. The mixture is reapplied to the areas of the reproductive system that require rejuvenation.

We developed a set of procedures and applied them initially in the area of ovarian rejuvenation, as menopause is a clear demarcation point of aging in women. To fully discuss the reason why humans experience menopause is beyond the scope of this article, but in summary it is about the efficient use of resources, at the molecular, societal or ecological level and this had relevance in how we approached solving this issue. Only five species are known to experience menopause: Pilot whales, Belugas, Narwhals, Killer whales (Orcas) and Humans. Though information is scarce on post-menopausal

whales, numerous studies on humans have shown that the later a woman goes through menopause the longer she will live. Early menstruation has been linked to higher risk for adult obesity, diabetes, and cardiovascular disease (CVD). Later menopause and longer reproductive years is also linked to decreased CVD risk, and there is 13% increased chance of exceeding average lifespan if a woman had 40 years of reproductive abilities as opposed to 33 years. A recent study from the Leiden Institute in the Netherlands also shows that the later a woman has children the longer her lifespan. The results showed that a woman would live an extra 22 days for each year later she has children. Whilst this is only a marginal increase it clearly shows that there is a link between menopause and longevity.

Just as we were about to start with our first full round of stem cell procedures, following on from an initial clinical study of ovarian rejuvenation with Platelet Rich Plasma (PRP) in 2018, we were shut down by the COVID-19 pandemic. We had a series of patients ready to go, but with no destinations available. Insofar as possible, we kept the candidates prepared for the procedure coming up with tailored dietary programs, exercise routines and supplements that enhanced reproductive fitness in our clients.

We created specialized menus to maximize the pro-





duction of fertility hormones (estrogen & progesterone), and to aid in weight management with the aim to achieve an optimal BMI, between 19 to 23. Secondly, the team created the HUGs routines which is a superset comprising of metabolism-increasing, core, upper body and aesthetic exercises. Each candidate was given a tailored routine designed to improve their core muscle control and build strength in areas that were needed. Finally, we looked at supplements to augment health.

The results, however, were not as expected. The assumption was that supplements would have the most effect and that the diet and exercise were nothing more than a formality. Instead, we found it to be totally the opposite.

With supplements, the initial plan was to maximize fertility health with a usual round of female multi vitamins, along with Vitamin D3 + K2, B-Nicotinamide Mono Nucleotide (B-NMN) and Hyaluronic acid. The rationale behind this is that B-NMN acts as a mitochondrial energizer and the Hyaluronic acid reduces inflammation. Vitamin D3 + K promotes skeletal strength, immune system strength and improves basic levels of energy and mood. However only 15% of candidates had any significant increase in energy, 70% no difference at all and 15% felt an uncomfortable energy flush.

Diet is crucial in creating a solid foundation for fertility

health. An interesting fact is that the candidates from developing countries (specifically West Africa and South America) had better basic metrics of health than those that had experienced the standard American diet. The mix was 57% North American, 15% East and South Asian, 11% West African, 7% South American, 5% West Asian and 3% other. The composition of the candidate group contained none that had been raised in Europe. This is not a racial mix, it is where the candidates were born and raised, showing that the effect of diet and lifestyle can significantly impact general well-being irrespective of racial genetics. This is also taking into consideration that all the candidates' current lifestyles were approximately of equal socio-economic health levels. The conclusion was that good diet gives a solid foundation for fertility health, but bad diet creates a very unstable and less predictable footing.

Exercise can also result in significant positive or negative swings to health. The main effects that exercise has on the body





is to improve musculature, improve capillary growth, maintain bone density and engender a general sense of well-being. Our candidates presented a full range of different body types, fitness levels and physical wellbeing. In creating the HUGs routine, the team applied their combined knowledge of anatomy, sports science and biology to create a superset of exercises that were easy to implement and could be adapted to the level that the candidate started at. The results of this research yielded a simple yet effective exercise routine that could be tailored to the individual without the requirement for the use of a gym or fitness salon. Furthermore, it could be adapted to maintain maximum effectiveness after the surgical procedure was undertaken.

We also implemented weekly consultations with the candidates to track and ensure continued progress.

The general assumption with supplements is that you take the same supplements as a

regimen without variance. After implementing our diet and exercise routines, what we discovered is that supplements are a temporary aid rather than permanent crutch. So that with over 75% of the candidates, they were taking significantly fewer pills under our methodology. As fitness and energy levels rose due to diet and exercise, the need for supplements reduced significantly. In some cases as early as 1 month and with majority by month 3.

We found an interesting dynamic in that the consultations, regular weight loss and exercise had a beneficial effect in reducing cortisol and inflammation - but not in the way we had envisaged. It is hard to motivate a patient by showing that they are increasing their estrogen levels, however when we stated that x lbs. of weight will be lost, and subsequently was lost after implementing the diet and exercise routines, this engenders the client's trust in the program. The knock-on effect is that cortisol and adrenalin levels were reduced as the patients felt more relaxed. This in turn reduced inflammation and freed up the regulatory systems of their body to become more effective in other areas.

After two months we started to notice that a significant proportion of the candidates showed, where applicable, accelerated levels of weight loss, increased muscle tone and in one case the resumption of a



menstrual cycle before even having the procedure. This was even more unusual as the candidate in question was 61yrs old at the time and had been menopausal for nearly 5 years.

This led the team into researching the effect emotions have on longevity and how they clearly impact a patient's health. From this, we created the concept of Freudenspanne which is defined as the quantitative effect emotions have on the biological markers of aging.

The results of our programs have shown an 85% success rate in terms of improvement of the menstrual cycle volume and regularity or full resumption of menstrual cycle, albeit, with a very small sample size and following suspension of our full program due to the pandemic.

The next stage is the improvement of egg quality, which is the main thrust of phase 2. This is needed if you are looking to get pregnant, but we are not yet sure if this will significantly add to the longevity of the candidate. However there is enough anecdotal evidence to suggest that it can have impact on

longevity and so we shall be investigating this.

Secondly, we have researched and are in final stages of creating a peptide regimen that will be able to address significant portions of the decline of the endocrine functions as well as maintain protein synthesis in muscles and lay the precursor to youthful skin.

We are now trying to breakdown what aspects of the fertility mechanisms keep humans living longer. To do this we will have more data points gathered in the next phase. With more regular blood work and to see the effects on the markers of aging with bloodwork after 9/12/18 months. Additionally, on a select number we will also be looking at bone density markers, measures of skin elasticity, as well as levels of oxygen uptake efficiency (VO2 max, blood oxygenation).

Hopefully one year from now we will publish with our latest results from phase 2.

Email info@austinbiotec.com or go to our website www.austinbiotec.com for further information.



[@zackvarkaris](#)

Zack Varkaris

Is Scientific Director and founder of Austin Biotec. He holds a BSc in Marine and Molecular biology from Heriot Watt University.

In 2011, as part of a small team working in ODURF, Virginia he developed a cost-effective Algae to biofuel system, that produced both diesel and an unexpected byproduct of high value anti-ageing chemicals.

Whilst researching the effectiveness of these chemicals he created anti-ageing topical creams. Progressing into stem cell rejuvenation which resulted in the creation of Exotherapy™ & Rejucvacyte™ to develop these technologies and Methods into maximizing Human Health and lifespan.

Working on our Ethos which is that a functional reproductive systema and aesthetic maintenance is the foundation for a fully extended life.

The Freudenspanne concept was developed from the results of the first round of procedures.

Currently he is completing a book on Freudenspanne.

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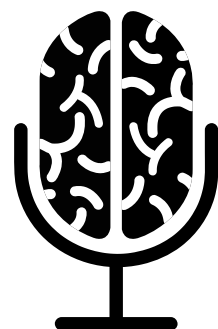
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ACKNOWLEDGMENTS

Everyone involved in the production of this magazine is humbled by the opportunity to have a publication that makes a real difference. Our magazine is woven into the fabric of our community and we recognize the importance of being culturally relevant, authentic at all times, and genuinely passionate about living well, living fit, and living long. Thank you to our contributors, partners and circle of friends for joining us in *extending the future*.

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