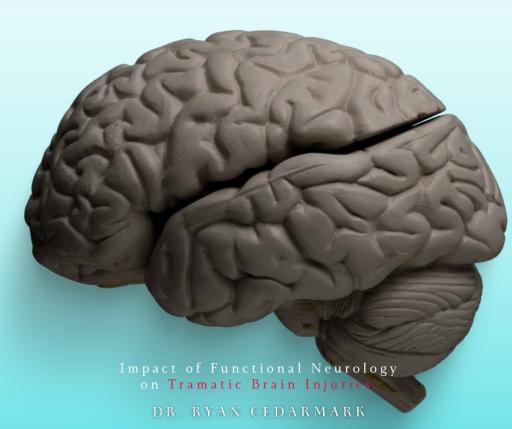


## INSIDE YOUR BRAIN



### INTRODUCTION

### Hi, I'm Dr. Ryan Cedermark.

At Neurosolution Atlanta, we understand the complexities and challenges that come with Traumatic Brain Injury. Having worked with many patients suffering from TBI, we see firsthand how frustrating it can be when conventional treatments fall short. That's why we take a different approach—one that looks beyond the surface and focuses on how your brain is truly functioning.

With our unique, science-backed approach, we develop personalized treatment plans aimed at healing your brain, restoring function, and helping you return to a fulfilling life.

Thank you for taking the time to learn more about how functional neurology can help restore balance and wellness after a traumatic brain injury. We're here to guide you through your recovery journey.

Warm regards,



Br. Lyan Cedermark

Dr. Ryan Cedermark graduated Magna Cum Laude from Life University in 2011. During his studies, he pursued postgraduate neurology courses and earned his Diplomate in Neurology from the American Chiropractic Neurology Board in 2013. Committed to a multidisciplinary approach to healthcare, Dr. Cedermark also graduated Magna Cum Laude with a Bachelor of Science in Nursing from Duke University and completed a Family Nurse Practitioner program at Georgia State University in 2018. He currently serves as adjunct faculty at National University, teaching in the Master's Program. Additionally, Dr. Cedermark is a Certified Functional Medicine Practitioner and holds board positions with the International Association of Functional Neurology and Rehabilitation (IAFNR) and SNA Biotech's Medical Advisory Board. His diverse educational background provides a unique perspective in today's healthcare landscape.



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### CHAPTER ONE

### Intro to Neurosolution Center of Atlanta

#### about us

Neurosolution Center of Atlanta is a leading provider of functional neurology services, focusing patient-centered care for those dealing with neurological conditions such as traumatic brain injurys. By utilizing cutting-edge technology and holistic methods, we aim to provide relief and long-lasting improvement to patients who may not have found solutions elsewhere.





### our mission

Our mission is to offer innovative, non-invasive neurological treatments that address the root causes of neurological dysfunctions. We focus on helping patients restore their quality of life through individualized care that targets their unique challenges.

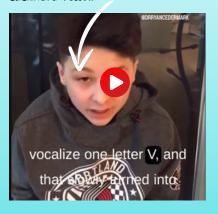
### MEET JESSE

### **Post-Concussion Syndrome**

Jesse experienced debilitating headaches, dizziness, light sensitivity and lost the ability to speak following a traumatic brain injury. After undergoing a functional assessment, Jessie began a treatment plan involving light therapy, balance retraining, and cranial nerve stimulation.

Within a week, his speech returned. Jesse reported fewer headaches. balance. and improved better cognitive clarity, enabling him to return to sports and school.

#### WATCH JESSE'S SUCCESS STORY BY CLICKING PLAY BELOW.



CHAPTER TWO

### What is Functional **Neurology?**



### definition & history

Functional neurology is an emerging field that optimizes the nervous system's functionality rather than solely treating its structural problems. Unlike traditional neurology, which often relies on imaging and other tests that only assess the "hardware" of the brain. functional neurology evaluates the "software"-the neurological pathways, processes, and sensory systems that determine how the brain works.

### approach

Functional neurology employs multifaceted approach, using advanced testing to measure the brain's performance. This includes assessments of balance, cognition, and eye-tracking, among others, to form a complete picture of a patient's neurological health. Treatments are non-invasive and are designed to restore optimal neurological function through targeted therapies that retrain the brain.



### education

To become a board-certified functional neurologist, you have to undergo 350 hours of extra training (specifically in functional neurology) after completing an MD (Doctor of Medicine), DO (Doctor of Osteopathic Medicine), DC (Doctor of Chiropractic), ND (Naturopathic Doctor), or PT (Physical Therapist). That said, the vast majority of practicing functional neurologists are chiropractors.

### CHAPTER THREE

### **Technology Used in Our Therapy Process**

### Photobiomodulation (lasers & red light)

Photobiomodulation, or light therapy, uses specific wavelengths of light to stimulate cellular activity and promote healing. This technique is particularly effective for traumatic brain injury patients, as helps regenerate damaged tissues, reduce inflammation, and enhance neural recovery.



### **Photoneuromodulation**

Photoneuromodulation delivers light energy directly to neurons, helping to reestablish efficient communication between brain cells. This method can calm the overactive "fight or flight" response often triggered by traumatic brain injurys, assisting patients to feel more balanced and centered.



### Other Technologies

- Balance Retraining-Balance assessments and exercises are vital in traumatic brain injury treatment, as patients experience manv dizziness and disorientation. By retraining the vestibular system, we help restore equilibrium.
- Therapy—This Vibration therapy uses vibrations to stimulate the nervous system and promote neural regeneration. Research has shown that whole-body vibration can improve brain inflammation, a common lingering issue in traumatic brain injury rehabilitation.
- Cranial Nerve Stimulation-This therapy targets specific cranial nerves to improve sensory integration and brain function. One important cranial nerve, for example, is the vagus nerve. Research has proven that specific stimulation of the vagus nerve assists in healing the injured brain.
- Guided Meditation-Mindfulness and relaxation techniques are incorporated to calm the nervous system and reduce stress responses. In our clinic, we use a device called the BrainTap. This uses binaural beats and visual stimulation during a guided meditation to alter brain wave states and improve overall parasympathetic function.

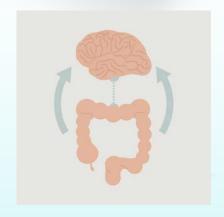
### CHAPTER FOUR

### **Functional Medicine Testing**

#### whole health

The body and brain connection matters, and that's why we've partnered with different functional medicine lab testing companies to offer specific testing to get a whole picture of not only brain function, but also gut function.

We believe that optimal nutrition can help improve brain function, however, proper testing is needed.



### book a call

### Curious about how Functional Neurology can benefit you?

Dr. Ryan is ready to explain how our treatments can make a real difference in your life. Simply click the button below, fill out the form, and our team will contact you to schedule your one-on-one consultation. Take the first step toward better health today!

**CLICK HERE** 

### MEET ALINA

### traumatic brain injury and Gymnastics

Alina, an elite gymnast, suffered from 8/10 head pain for several months after a traumatic brain injury. Traditional treatments had little to offer over the course of 2 months. After an initial assessment, Dr. Cedermark developed a specific plan for brain rehabilitation.

Over 5 weeks, Alina's head pain reduced to a 1/10 and she returned full time to school and gymnastics.

### WATCH ALINA'S SUCCESS STORY BY CLICKING PLAY BELOW.



### CHAPTER FIVE

# How Our Process Impacts Traumatic Brain Injuries

### condition overview

Traumatic Brain Injury occurs when external force is applied to the brain, either through direct impact or rapid acceleration and deceleration (such as in whiplash). TBI can result in physical damage to brain tissue, nerve fibers, and microscopic axons, which can cause a wide range of symptoms, including cognitive difficulties, headaches, and emotional changes. Mild TBIs, also known as traumatic brain injurys, often resolve quickly, but more severe or repeated injuries may lead to long-term or worsening symptoms.

### treatment process overview

At Neurosolution Atlanta, we start with an in-depth functional evaluation that includes balance tests, eye-tracking assessments, cognitive evaluations, and a brain scan using qEEG technology. These assessments provide a comprehensive view of how your brain is functioning, beyond what traditional imaging can show. Based on this information, we create a personalized treatment plan that may involve therapies like photobiomodulation, balance retraining, cranial nerve stimulation, and guided meditation.



### treatment impact

Our individualized approach helps heal both the physical and neurological aspects of TBI. Patients report significant improvements in cognitive function, emotional regulation, balance, and overall well-being. By addressing the specific needs of your brain, we help you recover from TBI more effectively and prevent long-term complications.

YOU'RE ALMOST THERE!

KEEP SCROLLING TO SEE HOW THIS
THERAPY CAN IMPACT YOUR LIFE.

### CONCLUSION

### Final Note from Dr. Ryan.

I know how overwhelming and frustrating traumatic brain injuries can be, and I want you to know that you don't have to go through this alone.

At Neurosolution Atlanta, we take the time to really understand the full scope of your condition, offering treatments that go beyond just managing the symptoms. By addressing the root causes, we help you regain balance, clarity, and control over your life.

### I invite you to take the next step toward your recovery.

Book a free consultation with me to dive into how functional neurology can make a real difference for you. During our session, we'll explore your symptoms, perform a thorough assessment, and craft a personalized treatment plan designed to get you back on track.

Don't wait. Your recovery is within reach, and I'm here to help you start that journey. Click below to schedule your free consultation, and let's work together to get you feeling like yourself again.

### Warm regards,





### book a call

Click the button below, fill out the form, and our team will contact you to schedule your one-on-one consultation.

Take the first step toward better health today!

**CLICK HERE** 

W: NEUROSOLUTIONATL.COM

F: INFO@NEUROSOLUTIONATL.COM

### **RESOURCES**

### Research and Resources

To view the resources below, click the title of the article, and it will open a new window for you to view the article in its entirety.



THE EFFECT OF PHOTOBIOMODULATION ON THE BRAIN DURING WAKEFULNESS AND SLEEP



PHOTOBIOMODULATION FOR TRAUMATIC BRAIN INJURY AND **STROKE** 



TRAUMATIC BRAIN INJURY RECOVERY WITH **PHOTOBIOMODULATION** 



CHANGES IN BRAIN FUNCTION AND STRUCTURE AFTER SELF-ADMINISTERED HOME PHOTOBIOMODULATION TREATMENT IN A TRAUMATIC BRAIN INJURY CASE



POTENTIAL ROLES OF VAGUS NERVE STIMULATION ON TRAUMATIC BRAIN INJURY



WHOLE BODY VIBRATION ATTENUATES BRAIN DAMAGE AND NEUROINFLAMMATION FOLLOWING EXPERIMENTAL TRAUMATIC **BRAIN INJURY**