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**The Happy Brain Company** 

## Dr. Steve Cagen explains Neurofeedback, the QEEG Brain Mapping Scan and How Brain Training Works.



Almost daily I am asked by a parent or member of the community "what is the Brevard Brain Training Center" and "what do we do there." While the science of brain training is very complex, the explanation and process is quite simple.

Brain Training is a natural, drug-free way to help the brain function better by training it to function better. In our office, we use Neurofeedback and a variety of tools and

techniques designed to enhance our clients brain fitness. Brain training exercises the brain to function more efficiently by resynchronizing brainwaves which may be deregulated. When the brain functions more efficiently it performs better thus eliminating or reducing many symptoms the client is suffering from. Further, with brain training, we have seen either a reduction or total elimination of the need of prescription drugs in our patients.

## Understanding that the body is electro-chemical in nature means that what once could only be done with drugs can now be done without them.

Throughout the course of our lives each of us has suffered a trauma or insult to our brain which has caused damage, whether we are aware of it or not. It may have been emotionally, physically, or chemically induced but.... each of us has been damaged to an extent. For some, life goes on as normal but for others symptoms begin to occur such as anxiety, depression, sleep disorders and mood swings as well as the attention deficit spectrum which includes ADD and ADHD. Typically issues such as these have been treated using drug therapy but that comes at a cost and in the end, does nothing to help create a permeant change. This is a key point which needs the utmost attention. Neurofeedback creates lasting changes without the damaging side-effects of drugs which only create temporary changes (while they are being taken).

Understanding that the human body is electro-chemical in nature means that what we once thought could only be treated with medications can now be done without them.

At the Brevard Brain Training Center, we take a different approach to helping people achieve measurable, lasting results to issues they never thought would go away. Using Neurofeedback and Audio Visual Entrainment Devices along with other all-natural, non-invasive methods we help teach the brain how to resynchronize itself and communicate better with itself – and your body. This is great news for people seeking a more natural way to heal one which is natural, lasting and offers measurable results. These results are explained under the science of neuroplasticity which recognizes the brain's ability to reorganize itself by forming new neural connections throughout life. In essence, the brain can heal itself and will do so to the best of its ability given the right stimulus.

## Neurofeedback is a way of helping the brain to function better by showing it how it is currently functioning.

**Neurofeedback is our primary treatment modality.** It works under the feedback/reward principle which recognizes that as a self-healing organ which has the ability to learn the, brain will work to repair itself if ... it can see how it is functioning and given a reward when it functions more efficiently. Over time this "brain exercise" becomes learned and leads to a new, better way, of overall function and improved way of life.

#### "At the Brevard Brain Training Center we take a drug-free, all-natural approach to helping individuals achieve their maximum potential through enhanced brain fitness."

Neurofeedback, can help reduce or eliminate a broad range of symptoms including: anxiety, stress reactions, depression, sleep problems, headaches and migraines, chronic pain, compulsive behavior, mood swings, stroke, traumatic brain injury, seizures, autism, attention deficits and many other dysfunctional states that affect physical and emotional well-being.

As the name implies, Neurofeedback is a way of teaching the brain how to function better by showing it how it is currently functioning.

## Many of our patients are peak performers who are always seeking ways to improve and enhance their performance.



To see if Neurofeedback is proper for a client we begin with a preliminary 19 point QEEG. This is done in our office and is a completely non-invasive test. A Quantitative Electroencephalography (QEEG) is a technique of taking EEG data and producing a visual map of the type and location of rhythms in a brain. The QEEG provides an analysis of brainwave function. We compare and cross-reference your

readings to a normative database of 250,000 other readings taken over the last 40 years. This is the largest database in the world. It is how we can determine if your brain waves are regulated or dysregulated. This simple process takes only an hour but produces some of the most important information a person can have about themselves; how their brain is functioning.

Not all our clients have "problems;" many of our clients are peak performers and athletes who are seeking a competitive edge and way to improve their personal performance

**The understanding to grab on to here is** that by using a brain map we can read the brain waves and if the brain waves are dysregulated, it can lead to symptoms associated with ADD/ADHD, Asperger's Syndrome, Autism Spectrum Disorder, and many others listed below.

## Eventually the brainwave activity is "shaped" towards a more desirable, more regulated performance.

If your brain map shows dysregulation, the next step would be to consider a course of Neurofeedback. Neurofeedback is the learning component which gives your brain the opportunity to see how it is functioning while at the same time giving it the feedback it needs to begin making changes.



**During a typical neurofeedback session**, we apply electrodes to the scalp to "listen in" on brainwave activity. We process the signal by computer, and we extract information about **certain key brainwave frequencies**. (All brainwave frequencies are equal, but some are more equal than others...) We show the ebb and flow of this activity

back to the person, who attempts to change the activity level. Some frequencies we wish to promote. Others we wish to diminish. We present this information to the person in the form of a video game or movie. **The person is effectively playing the video game or watching the movie with his or her brain. Eventually the brainwave activity is "shaped" toward a more desirable, more regulated performance.** The frequencies we target, and the specific locations on the scalp where we listen in on the brain, are specific to the conditions we are trying to address, and <u>specific to the individual</u>. The results become real and lasting.

Neurofeedback has become great news for sufferers of many types of neurological conditions including brain injuries, seizures, and PTSD.

## I believe in Neurofeedback because I have studied it, practiced it and seen it work. It gave my daughter her life back.

When our daughter suffered an extremely severe traumatic brain injury in an automobile my wife and I were devastated. Although both Doctors of chiropractic and having studied the human body for most of our lives, we were ill-prepared to handle what we were about to face. Left to the treatments recommended, Allie would have languished inside of a system which gave her little hope to begin with. Not understanding how drugs and other suggested treatments were going to help an already injured brain, we began exploring other more natural options eventually finding Neurofeedback.

## Our story is nothing short of miraculous and led to the creation of Brevard Brain Training.

#### What can the patient expect with Brevard Brain Training?



The Brain Mapping Evaluation consists of an initial Quantitative EEG. We are able to read the brainwaves and determine if there is any dysregulation and where the dysregulation is located. We use this information to determine which part of the brain we need to exercise and strengthen to help the brain function better.

The QEEG measurements include reading all of the different brain waves (delta, theta, alpha, beta) at each of the 10 areas of the brain. We measure the left and right sides of the brain including the occipital lobes, parietal lobes, temporal lobes, central sensory-motor areas, and frontal lobe.

### It is uncanny how you can watch the changes as a persons brainwaves become more regulated.

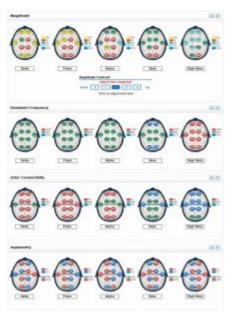
A QEEG is done every 10 visits so that we are each up to date on your own brain wave activity. **Most QEEG charges, when ordered out, are \$750-1000 per mapping; we charge much less to make it more easily available to everyone.** 

Certain aspects of the Brain Mapping Report that no other system of analysis is doing *involves the correlation of which exact area of the brain which is dysregulated to the results from functional MRI studies that have been done over the past 10 years to produce a probability chart of what a person is experiencing.* This correlation is then related to the actual self-reported questionnaire. Items such as memory, anxiety, depression, attention, hyperactivity, anger, rumination and many other feelings and tendencies are tracked and evaluated as a person travels through the sessions and, you get to see how this is changing throughout the process. It's uncanny how you can watch the probability patterns change as a person's brain waves become more regulated. Now we have both, subjective and objective findings to reference for each patient, and we are able to track what makes sense to track.

#### What to Know About the First Few Visits with Brevard Brain Training

There is initial paperwork on our website; every evaluation begins with a brain mapping evaluation to determine if Neurofeedback is needed or appropriate. This allows us to know where there are dysregulated areas and where there are not. If we discover that other factors are causing their symptoms we can appropriately give them recommendations for other therapies, in other offices, and we've saved everyone time, energy and money."

## Most people experience significant results after 5-10 visits depending upon the severity of the dysregulation.



Other things to know about Neurofeedback: No electricity is put into the body or brain. It's painless and non-invasive. We are simply reading or picking up the brainwaves that are already occurring. Nothing is ever *put into* the body from the machine, in terms of electricity or shocking.

On the first visit, we go over your history and do the brain mapping evaluation.

On the second visit, we go over findings and share

the results of the brain mapping evaluation and determine if they are a candidate for Neurofeedback.

**Most people experience significant results after 5-10 visits** depending on the severity of the dysregulation, although it takes approximately 25 visits to create the neuroplastic changes that will last.

Brevard Brain Training <u>sees both children and adult</u> patients with the goal of helping each reach their full potential and obtain a better quality of life. We will help you get to where you need to be in terms of what will be the most effective methods for you and/or your child. These may include supplements, dietary information, trace mineral analysis and/or the use of other brain training modalities.

For a no-obligation consultation, to learn more about our office or, to make an appointment, contact Dr. Cagen at (828) 885-7100

# Dr. Steve Cagen is available to speak to your group or organization.



Dr. Steve Cagen, clinical director of the Brevard Brain Training Center is a practicing Doctor of Chiropractic licensed in NC and GA. He holds a Bachelor of Science Degree in Biology and a Doctorate Degree in Chiropractic. He is a sought-after speaker in the areas of natural wellness for the brain/body/mind and has published several books and articles on the subjects of positive motivation and goal setting. He holds frequent workshops focused on weight loss and living a wellness lifestyle.

"I understand the issues people go through because they are the same ones I have gone through. I would appreciate to opportunity discuss Brevard Brain Training and the benefits of Neurofeedback with you to see if we can provide the right care for you."

Use this coupon to save \$100.00 on your initial brain map and report of findings.

#### **Brevard Brain Training.**

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