

Please read this informed consent document carefully as your signature on this document will indicate that you have read it, understood it, and accept its provisions.

## **NEUROFEEDBACK**

**Purpose of Treatment:** The purpose of Neurofeedback is to resolve inefficiencies in EEG brainwave patterns that may underlie *and/or* exacerbate various mental health *and/or* physiological conditions.

**General Procedures:** Neurofeedback causes no direct pain and it is not invasive in any way. One or more electrodes are placed on the scalp *and/or* ears to act as sensors to record an individual's brainwaves (the electrical activity created in the brain). This electrical activity then passes through an amplifier to a computer; this data can then be viewed in various formats on a computer monitor. The client will be assisted to learn how to change his/her brainwave patterns in desired directions. Neurofeedback is also called EEG Biofeedback *and/or* Neurotherapy.

**Benefits, Limitations, and Risks:** In choosing Neurofeedback, you need to be aware that, although there has been 25+ years of research since this was first developed at UCLA, it is still considered relatively new and, to some, experimental. Many published clinical studies have demonstrated the effectiveness of Neurofeedback for treating various problems. Some Neurofeedback interventions have extensive published support (such as for attention and learning issues, mood and anxiety disorders, and seizure disorders) and others have little or none (such as chronic fatigue syndrome, fibromyalgia, sleep disorders, and bipolar disorder, among others). As such, you should be aware that some insurance company personnel and professionals like doctors and psychologists are not aware of the latest published research or *may* consider the support for Neurofeedback to be insufficient for considering this intervention to be validated and efficacious. There are also many health care practitioners who are convinced that this particular intervention has been validated as efficacious. They believe that the efficacy of Neurofeedback for dealing with your child's problem has been adequately demonstrated. In fact, recently, the American Academy of Child and Adolescent Psychiatry (AACAP) in their January 2005 Journal issue dedicated to Emerging Interventions, reviewers stated:

"EEG biofeedback meets the AACAP criteria for clinical guideline (CG) for treatment of ADHD, seizure disorders, anxiety (OCD, GAD, PTSD, and phobias), depression, reading disabilities, and addictive disorders. This suggests that EEG biofeedback should be considered as an intervention for these disorders by the clinician."

The American Counseling Association's *Journal of Counseling and Development* also published an article in their January 2012 issue explaining the process of Neurofeedback and why it should be integrated into counseling practice. Literature supporting the use of Neurofeedback is also available at the International Society for Neurofeedback and Research (ISNR) website [www.isnr.org](http://www.isnr.org).

Although no guarantees or promises can be made that Neurofeedback will be effective, experienced clinicians are usually reporting 80% to 85% improvement rates. Significant improvements in school and work performance, as well as increased control over negative behavior and emotions have been reported, and in some cases, clients have been found to no longer require medication for their disorder. However, in approximately 20% of cases, people are unable to change their brainwave patterns *and/or* no benefit is gained, and in some very rare cases, some people's condition(s) worsen. Also, although rare, it is possible that Neurofeedback can reveal underlying conditions which were not previously known, and which may cause a worsening of symptoms, or indicate new areas that need additional treatment.

At times, clients will request Neurofeedback for issues or conditions that are not well researched. In these instances, Neurofeedback must be viewed as experimental in nature. This means that there is even less predictability with regard to prognosis or outcome; and again, in these cases a client's condition may not improve and, although unlikely, could worsen.

The willingness of the client to actively participate in this process is a critically significant factor in the success of Neurofeedback, and a client who is resistant or oppositional to the treatment may not be an appropriate candidate for

Neurofeedback. Further, excessive consumption of alcohol and/or use/abuse of drugs or illegal substance are likely to negatively affect the outcome of Neurofeedback. It is imperative that clients refrain from alcohol abuse and/or inappropriate or illegal use of drugs and/or substances during the course of Neurofeedback treatment, which includes times between sessions. Clients who cannot comply with this requirement will have treatment terminated until such time as they can comply with this requirement. Clients should also be aware that the abuse of alcohol and other drugs can reverse the benefits of Neurotherapy after treatment.

Neurofeedback is a type of treatment that usually requires several individual sessions to achieve benefit. While some may achieve the desired level of benefit with as little as 10-15 sessions, some may need as many as 40 or more to achieve the desired level of symptom resolution. Currently there is no way to precisely determine, prior to treatment, how many sessions will be necessary to achieve benefit, therefore clients are asked to plan on a minimum of 20 sessions of Neurofeedback prior to starting treatment.

Clients should be aware that particular types of Neurofeedback (similar to counseling) can bring up painful memories. This can be part of the growth and healing process, however, it can also be emotionally painful. Also, although it is rare, some professionals in this field have reported negative effects of Neurofeedback including headaches; negative feelings (i.e. anxiety, frustration, irritability); unusual physical sensations (i.e. dizziness, fatigue, tingling sensations); no change or worsening of symptoms and/or behavior; exacerbation of medical conditions; and in some very rare cases, psychotic symptoms. There is also a potential for disruption in family stability. If, following a treatment session, you feel confused, disoriented or light headed, please inform me and rest until you feel normal again; do not drive a vehicle or operate equipment until these symptoms subside. If at any time during or after a treatment session you are experiencing negative effects such as described above, again, please contact Grey Matters Neurofeedback or your physician immediately.

It is important to understand that a quantitative EEG (QEEG) is not the same as a "clinical EEG" which is used in medical diagnosis to evaluate epilepsy or to determine if there is serious brain pathology, such as a tumor. The QEEG assessments we conduct are not intended to diagnose neurological disorders, nor intended to be used for any medical purpose whatsoever. It is not designed to diagnose tumors, epilepsy, or other medical conditions in a manner like an MRI or CAT scan. The Quantitative EEG evaluates the manner in which a particular person's brain functions from an efficiency standpoint, and assists in directing the Neurotherapy treatment. The QEEG neurometric statistical analysis allows us to know, in many cases with a 95% degree of accuracy, that someone has functional brain inefficiencies. The QEEG also provides valuable input that may assist in the diagnosis of various psychiatric-psychological conditions; but it is a fundamental principle that one method alone should not be used to make a diagnosis or for decision making. Therefore, a QEEG alone will not be used for diagnostic purposes. You should recognize that the QEEG evaluation is noninvasive and no electrical current is put into the brain. However, the electrode cap is tight fitting and can become uncomfortable before the evaluation (and full cap training) is over. In order to obtain good electrode connections for assessment and training, it is also not unusual for the skin to be scratched in tiny areas under a few of the electrodes.

Unless it is specifically requested (with an additional evaluation cost) a neurologist or medical doctor will not be reviewing the EEG data for presence of seizures or other neurological disorders. If you suspect a seizure disorder, or any other neurological disorder, you are strongly encouraged to see a neurologist prior to seeking Neurotherapy services. With a neurologist's agreement, Neurofeedback could be performed when appropriate. Neurofeedback may be a helpful adjunctive treatment for many neurological disorders such as stroke, closed head injury, seizure disorders, and Tourettes syndrome.

#### MEDICATION & CONSULTATION WITH YOUR PHYSICIAN:

It is important to realize that Neurotherapy and/or Neurofeedback is not a medical treatment. This is especially true when the client seeks Neurotherapy while taking medications, especially psychotropic medications (e.g. for migraines, headaches, seizures, emotions, hyperactivity, attention, perceptions, etc.).

With regard to medications and QEEGs: The best QEEG is done without any medications in the client's system and/or having had a medication clearance time of at least 5 half-lives of the medication. However, there are times when it is not clinically appropriate or desirable to stop medications before a QEEG is performed. These issues will be individually

discussed with you prior to scheduling the QEEG for you/your child. If a client decides to titrate off medication prior to obtaining his/her QEEG, this process must be supervised and directed by the client's prescribing physician, as improperly decreasing or abruptly stopping some medications may be life threatening or detrimental to your health. While the general effects of several categories of medications on the EEG are relatively known, and thus allow some interpretation in light of those medications, the effects of some medications on the EEG are not known.

With regard to medication and Neurofeedback: It is possible to proceed with Neurofeedback even though the client resumes and/or continues taking medication. However, if you are taking medication it is important to remain in close communication with your physician while engaging in Neurotherapy. It has been clinically observed, and commonly recognized within the Neurotherapy field, that the need for some of these medications may decrease after a few Neurofeedback sessions; but the medication may remain in your system and some individuals may have negative side effects because of the decreased need of the body to rely on that medication. Some patients have a tendency to want to decrease medications without consulting with their physician. All decisions regarding medication and/or changes of medication must be done with the consultation of the prescribing physician, as improperly decreasing or abruptly stopping some medications may be life threatening or detrimental to your health—please consult your physician. It is also important to realize that conducting Neurofeedback in the presence of medication may cause the course of treatment to last longer than a case where no medication is involved.

**ALTERNATIVES TO NEUROTHERAPY:** In making an informed consent decision to enter into treatment with Grey Matters Neurofeedback, you should be aware that there are alternatives to Neurotherapy treatment. These include medications, various types of traditional psychotherapy, and in the case of brain injuries, speech, occupational, and physical therapy. Studies have shown that side effects exist with most medications, and about 30% of persons entering psychotherapy do not change, or in a few cases get worse. If in doubt, you may certainly seek more information either through reading or seeking another opinion.

**TREATMENT DECISIONS AND PLANS:**

You have the right to participate in treatment decisions and in the development and periodic review and revision of your/your child's treatment plan. If, at any time, you wish to review and/or revise your/your child's treatment plan, please let us know and we can facilitate and discuss this with you.

**FDA CONSIDERATIONS:**

Currently the only application for which any EEG Biofeedback (aka Neurofeedback) equipment has been registered with the FDA is for the purposes of relaxation by training of alpha waves. Any application outside of this scope is considered a use of biofeedback in an "off label" fashion. The FDA recognizes that it is completely acceptable for an appropriately licensed clinician to use their clinical judgment in the use of FDA registered equipment for off-label purposes. Many times in the Neurotherapy field, the Neurofeedback that is provided is done so on brainwaves other than the alpha frequency, and is also done for purposes other than relaxation (i.e. to improve attention or mood), and so would be considered an off-label use of EEG Biofeedback by the FDA.

**RIGHT TO REFUSE TREATMENT OR WITHDRAWAL CONSENT:** Your (or the client's legal representative's) signature at the end of this document will serve as consent to treatment and your agreement that you freely and voluntarily wish to undergo (or have your child undergo) a Neurotherapy assessment in the form of a QEEG evaluation and participate in Neurotherapy/Neurofeedback treatment, if indicated. However, you should know that you (or the client's legal representative) have the right to refuse any recommended treatment and/or cessation of Neurotherapy treatment is very likely to result in your (or your child) not achieving benefits from the Neurotherapy treatment. If you decide to withdraw from treatment, any unused sessions you have paid for in advance will be refunded.

**RIGHT TO CONFIDENTIALITY:**

All client information and records are secured and kept confidential according to HIPPA regulations and the ACA ethical codes. If Shari Johansson or her counselors/technicians see clients in public settings, they will refrain from acknowledging them to protect client privacy. However, clients are welcome to initiate contact in public settings.

*Grey Matters Neurofeedback*  
*Shari Johansson, MA, LPC, NCC, BCN*  
*12211 W. Alameda Pkwy., Ste. # 105*  
*Lakewood, CO 80228*

*Disclosure and Informed Consent*

303-249-3622

The following Items are particularly Important and require special emphasis. Please initial each of the following Items:

\_\_\_\_\_ I have had sufficient time to read the foregoing statement to allow me to fully understand it and/or to have any uncertainties clarified before signing.

\_\_\_\_\_ I understand that there are usually significant improvements but that improvements in any individual case cannot be guaranteed, and depends on the willingness of clients to commit themselves to treatment and actively participate during the Neurofeedback sessions. I further understand that some people do not improve, becoming worse before they come better, or may even, in rare cases, find their problems have worsened. I am willing to accept these risks.

\_\_\_\_\_ I have familiarized myself with the "Brain Health" information on the Grey Matters Neurofeedback web site, and I understand that practicing good brain health in the areas of diet, exercise, sleep, work and relationship habits are Important for the success of my Neurotherapy treatment.

\_\_\_\_\_ I understand that psychotherapy, in addition to Neurotherapy, from a qualified psychotherapist may be required as a condition to receiving Neurotherapy services; and that this requirement may arise after treatment has begun, and that Neurotherapy may need to be stopped until psychotherapy arrangements can be made.

\_\_\_\_\_ I understand that all of my information will be kept confidential, and that my name and identifying information will not be shared with anyone without my written permission. I understand that Shari Johansson provides instruction and supervision to students seeking licensure in counseling and certification in Neurofeedback, and may discuss my therapy without disclosing my identity.

\_\_\_\_\_ I understand that Neurotherapy is considered to be a relatively new treatment and some in the medical community and insurance companies may still consider it to still be experimental. I understand that it is not likely that insurance will provide benefits for any of the services provided. I hereby release Grey Matters Neurofeedback and/or any of their sources of supervision, from any liability related to my/my child's Neurotherapy treatment and agree to hold them, and/or their sources of supervision, harmless from any effects caused directly or indirectly from Neurotherapy and/or Neurofeedback.

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I HAVE READ THE FOREGOING "Informed Consent and Policies", understand it, have clarified all uncertainties before signing, and agree to all the provisions stated herein. My signature below serves as my consent for Grey Matters Neurofeedback to provide Neurotherapy services for:

Name of Client: \_\_\_\_\_ Signature of Client: \_\_\_\_\_

Printed Name of Responsible Party: \_\_\_\_\_

Signature of Responsible Party: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name of Clinician: \_ -" - \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

I am currently under the care of a medical or psychological professional, and I agree to meet with him/her regularly during Neurofeedback training. I also hereby give Shari Johansson permission to contact the medical professional named below to discuss my treatment progress if necessary.

Client Signature, \_\_\_\_\_ Date, \_\_\_\_\_

Name & Phone # of Medical Provider \_\_\_\_\_