Dear Patient,

We would like to welcome you and thank you for making a neurofeedback appointment with us at Peter Bower M.D. and Associates. We look forward to seeing you for your upcoming visit, and to help prepare we ask that you complete a few forms prior to coming in. In this packet you will find a brief explanation of neurofeedback, the Brain Map Prep Instructions, and a description of the benefits/risks associated with this treatment. Please read all these forms carefully and complete the tasks as instructed prior to your appointment. Also included are the three following forms which you must print to complete, you may submit the printed forms to us when you come in for your appointment.

- 1. Informed Consent Form
- 2. New Mind Client Acknowledgement
- 3. Intake Form

There are several assessments you will need to complete online, the website you will use to access these is www.my-newmind.com, you will need to contact us at the phone number or email address below to get your login information. Once logged in please complete the three following assessments:

- 1. Physiology
- 2. ISI
- 3. CEC

You must complete all of these prior to your initial appointment, the online assessments will generally take up to one hour to complete. You may come early for your appointment and complete the printed forms and online assessments in our office if you prefer, it is helpful to let us know in advance if this is what you would like to do.

If preferred, you may pick up this packet at our office in person or have them emailed to you. For any further questions you may have, please do not hesitate to call and ask for Diana or Rachel at (434)978-3609, or email us at neurobio@soundmedicine.com. We are happy to assist you however we are able, and we look forward to seeing you for your upcoming appointment.

Thank you,

Diana Bower R.N., F.N.P.

What is Neurofeedback?

Neurofeedback literally means "brain" and "input", where the brain is monitored and input is given instantly. Neurofeedback specifically monitors brainwaves, looks for irregularities, and produces a signal that is designed to correct the irregularity and guide the brainwave back into a healthy pattern. With repetition of this process over time, the brain will learn to stay in healthy ranges without the aid of the program. The result is an improvement in brain regulation which can reduce or eliminate most neurological symptoms.

What type of input is used?

The signal source varies based on the system used, but it usually involves audio or video of the patient's choosing. This process is so easy; a patient can get better just by listening to their favorite music or watching their favorite videos. **The process is non-invasive, requires no drugs, and is pain free.**

Who Can Benefit?

Neurofeedback can work on anyone, no matter the age. All that is required is the ability to focus on the audio or video stimulation. Any neurological condition that involves irregular brainwaves can be targeted and improved with neurofeedback. These conditions include attention-deficit disorder, addiction, anxiety, autism, brain injury, depression, fibromyalgia, insomnia, migraines, obsessive compulsive disorder, stress, stroke and more!

What Are Brainwaves? How Do They Affect Me?

Neurofeedback targets the four primary brainwaves (Delta, Theta, Alpha, and Beta). Each of these brainwaves is responsible for regulating the active and subconscious aspects of your body. Take a look at the following diagram:

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Delta Brainwave

Sleepy, Dreaming

Theta Brainwave

Drowsy, Meditative

Alpha Brainwave

Relaxed, Reflective

Beta Brainwave

Alert, Working

Delta brainwaves are associated with deep, dreamless sleep and regeneration. Delta brainwaves are dominant when you are asleep, and are responsible for healing the body.

Theta brainwaves are associated with light sleep or extreme relaxation. When your subconscious takes over you start producing Theta brainwaves.

Alpha brainwaves occur when you are awake but relaxed and not processing much information. When you first get up and right before you fall asleep, you are generating Alpha waves, as well as when you close your eyes to rest.

Beta brainwaves are associated with the mental state most people are in during the day and most of their waking lives. When you are alert and focused, you are producing Beta brainwaves.

While each of these brainwaves is responsive for different body functions, they all are equally important to your health and well-being. Researchers have known for decades that there is a correlation between irregular brainwaves and common neurological conditions. Neurofeedback is the first field to directly target these irregular brainwaves and restore them to normal ranges.

Decades of Research

Over 1,000 studies have been published in relation to neurofeedback and biofeedback. The early animal research, which has been validated in many peer reviewed journals since the 1970's, showed that brainwaves can be changed through operant conditioning, and that seizures are reduced with EEG training. These studies were originally done in the 1960's using cats with no chance of placebo effects. Since the 1970's, research has been verified in human studies, and through decades of additional research on humans of all ages the basis for neurofeedback has become extremely solid. You can browse many research articles for specific conditions by visiting http://www.clearmindcenter.com/research.

Risks and Benefits

Benefits

The FDA recognizes that all interventions pose risks and benefits. Typically, the benefits of NFB far outweigh the risks and although on occasion it can result in a non-serious adverse event, as a form of biofeedback it falls under the category of other low risk activities such as progressive relaxation, hypnosis, breathing exercises, meditation, yoga and massage. The benefits are usually experienced as improved focus, enhanced concentration, increased energy, higher quality sleep, increased immune function, decreased moodiness, diminished agitation, and reductions in anxiety as well as reductions in other physical symptoms typically related to stress such as headache.

Risks

Training with neurofeedback can occasionally result in an adverse response that temporarily increases symptoms which are typically associated with relaxation and calming of the central nervous system such as fatigue, headache, lightheadedness, dizziness, irritability, moodiness, weeping, insomnia, agitation, difficulties with focus and anxiety. These reactions, if they occur, are temporary and typically only last for a short period. Once clients become more relaxed and aware, they tend to integrate past emotional issues and these symptoms subside.

Brain Map Prep Instructions

To begin your neurofeedback treatment, our first session with you will involve a QEEG brain map to identify irregular brainwave patterns. To do this we will use a cap that transmits the electrical impulses in your brain to our software which will generate a detailed report identifying problem areas and how we will address them. In order to get a clear signal of these brainwaves we need you to prepare in advance so that your brain is well rested and clear.

- 1. Where possible, avoid any over-the-counter medications for 3-4 days prior to your brain mapping if you are able to do so. This includes any supplements, vitamins and cold/flu medications.
- If you are sick, even if it is a minor cold, we ask that you reschedule your appointment. Illness affects the brain and can inhibit a clean reading of your brainwaves.
- 3. If you are taking stimulant medications (such as medications for ADHD, etc.) these should not be taken 48 hours prior to your brain mapping. You should **first ask your physician if this is possible** and if 48 hours is not, avoiding them for 24 hours or 12 hours is preferable **if you are able to do so**. The clearest brain maps are recorded with as little medication as possible.
- 4. Do not drink highly caffeinated beverages (coffee, tea, Red Bull, etc.) for at least 15 hours prior to your appointment. If you habitually consume larger than normal amounts of caffeine and avoiding it altogether will induce headaches or fogginess you may just lower your intake for the 15 hours before your mapping.
- 5. The night before your brain map please wash your hair 3 times with a pH neutral, cleansing/clarifying shampoo. Neutrogena non-residue shampoo is a good recommendation. Do not use any other hair products after washing, and do not wash your hair the morning of your appointment to be sure that your hair is completely dry before coming in.
- 6. Get a good night's sleep, at least 6 hours. Your brain requires sleep to function clearly.
- 7. The morning of your appointment, eat a high protein breakfast and drink plenty of water.

In order to transmit a good signal, we use a water soluble electro-conductive gel that will be put in your hair. We have facilities for you to rinse your hair after your session if you like, be aware that you may wish to leave time for that after your appointment. Your brain mapping session will be most helpful to us and more importantly to you if you follow these instructions closely. Thank you!

Informed Consent for NeuroIntegration Therapy

This practice offers NeuroIntegration Therapy, also known as EEG biofeedback or neurofeedback training, to clients requesting such services. The training is offered to children and adults, either self-referred or identified by parents, physicians, teachers or other referral sources as having conditions shown to be responsive to this training. These conditions are generally thought to be those that appear to be associated with irregular brainwave activity where there is also clinical and research evidence to suggest neurofeedback training as a viable treatment approach.

Our staff has education, training and experience in neurofeedback and in EEG technology. We recommend the training based on our observations of improvement in clients with similar conditions. Scientific investigation is ongoing to determine the mechanism by which these improvements are achieved and therefore EEG neurofeedback is still considered by many to be an experimental treatment. We use standard methods to determine the proper training program and to measure progress during and after training. Neurofeedback is, however, considered an experimental approach and therefore we need client or parental informed consent for this training.

We do not claim that you or your child will improve from the training. However, test results indicate that more than 80% of clients improve on at least one test scale, and more than half improve on three out of four scales. A few clients who seem to get better at first may find that the improvement does not last after the training ends. Such clients may benefit from regular follow-up sessions. Some individuals may not experience any effects at all from the training. Our staff is always happy to discuss client progress. Other methods may also be effective for you or your child. We will be happy to provide information about such services at your request. Individual and/or family counseling may help you and/or your child integrate the gains from neurofeedback into everyday family, social, school, and work environments.

Neurofeedback training has been the subject of more than 30 years of research and clinical study. The training appears to be harmless as far as is known at present and no injuries have been reported or documented in a review of research literature. Neurofeedback is not a treatment; it is a training process. The instruments are merely measuring devices similar to a thermometer. Sensors are placed on the surface of the head and your child is given information about what is being measured. Nevertheless, beyond this, we do not make any representation concerning the safety or effectiveness of the training. Clients should continue other ongoing therapies until otherwise advised by a physician.

When you sign this form, you are indicating that you understand the information that it contains.

When you agree to participate in this program, you or your child are not obligated to complete the training if for any reason you believe it is not in your or your child's best interest. This means you may discontinue participation at any time. Training and test results will be available to clients and/or parents. If you, or anyone else who will use this machine, are subject to any form of seizures, epilepsy or visual photosensitivity please notify us prior to starting Neurofeedback training.

Yes, I understand and agree to the terms of this document. Yes, you may administer standard tests

Name of Client:	_ DOB:	Phone #:	
Client Signature:		Date:	
Parent/Guardian Name (if client is a minor): _		Phone #:	
Parent/Guardian Signature:		Date:	
Witness:		Date:	

New Mind Client Acknowledgements

I understand that:

- Neurofeedback is not a quick fix or cure-all but reduces symptom severity over time through training and improving Central Nervous System (CNS) regulation.
- The average number of neurofeedback sessions to achieve enduring change is 40 sessions.
- On average most people require 15 sessions to experience any symptom changes.
- If symptom changes fail to occur within 15-20 sessions it is likely due to either metabolic or stressful personal relationship issues.
- Hair analysis or organic acid tests will be requested if progress is slow.
- Side effects may result from prescribed drugs when dosage is not reduced over sessions.
- Reducing dependence on pharmaceuticals is a key objective of the training program.
- The chronic use of multiple psychotropic drugs impedes progress.
- Some agitation or irritability may occur for a couple of weeks following the first 15 sessions.
- Clients must make efforts to manage diet, exercise, sleep and stressful activities to achieve the best results.
- Failure to work with clinicians to make lifestyle changes can reduce or mitigate effects of neurofeedback training.
- I am expected to fill out the weekly progress tracker.

Client Signature:	Date:
Parent/Guardian Signature	Date:

NeuroIntegration Intake Form

PERSONAL INFORMATION

Name		Date of birth://
Parent/Guardian Na	ame	
		Age: years
City	State Zip	Gender: M F
Email address		
		Cell Phone
Work Phone		Fax
Occupation		

Tell us more about your needs and desires regarding brain health.

How can we help? What are you hoping to address or achieve through our NeuroIntegration Program?

HEALTH INFORMATION

1. OVERALL HEALTHOn a scale of 1-10, how would you rate your current health?(1 being the worst, 5 being average, 10 being the best)	123456	78910
2. SLEEP Rate the quality of sleep you usually get in the past month. At what time do you go to bed? At what time do you rise in the morning?	123456	7 8 9 10 _am/pm _am/pm
Are you able to sleep through the night? If NO, please describe:	YES	NO
Are you able to fall asleep easily most nights? If NO, please describe:	YES	NO
Do you wake refreshed? If YES, please describe any exceptions:	YES	NO
3. HEAD or NECK INJURY Have you ever injured your head or neck?	YES	NO
Ever had a concussion?	YES	NO
If yes, have you suffered more than one concussion?	YES	NO
Have you ever been in an auto, motorcycle or bicycle accident?	YES	NO
Have you ever had a traumatic brain injury?	YES	NO
Are you currently receiving care for this/these injuries?	YES	NO

Please describe your head or neck injuries using the reverse side of this page, thinking back over the years. Please consider the childhood and teen years, as well as adulthood, including home life, sports, accidents, slips/falls, etc.

4. CHRONIC HEALTH PROBLEMS?

Please list any chronic medical problems or brain health issues you have on the back side of this form.

5. HORMONES

Are you concerned that hormonal imbalances that may be contributing to your condition? YES NO

6. MOODS & EMOTIONS

How would you describe your general emotional state? (A brief sentence or short phrase of 3-4 words is fine.)

7. MEDICATIONS, SUPPLEMENTS & VITAMINS

13. Is there anything that you would like to add?

If you haven't previously listed these on our intake form, please provide a list here including name, dose, frequency and for what symptom you are taking each. Use the back side of this form if necessary.

<u>Medications</u>

<u>Nutrition Supplements/Vitamins</u>

ANY KNOWN MEDICATION ALLERGIES? Please list any medication allergies you may have:	YES	NO	
8. SUBSTANCES Do you <u>currently</u> use psychoactive drugs, medications or alcohol to pick yourself up or calm yourself down? Have you ever used psychoactive drugs, medications or alcohol <u>in the past</u> to pick yourself up or calm yourself? Are you currently a smoker? Do you consider your current use of tobacco, alcohol or street drugs a problem? If yes on any of these substances, circle those currently taking.	YES YES YES	NO NO NO	
Do you feel depressed or anxious at present? Have you suffered from depression or anxiety in the past? Circle condition if yes.	Depressed YES	Anxious NO	Neither
9. ATTENTION & LEARNING Any history of learning difficulties? Any history of memory problems?	YES YES	NO NO	
Any history of ADD/ADHD? In childhood? Adulthood? (please circle)	YES	NO	
10. OTHER CONDITIONS Any history of other psychiatric conditions in yourself, such as schizophrenia, bi-polar disorder, psychosis? Any history of other psychiatric conditions in family members, such as Schizophrenia, bi-polar, psychosis?	YES YES	NO NO	
11. COUNSELING & PSYCHOTHERAPY Are you currently working with a psychiatrist, therapist, counselor or clergy in matters regarding your mental health? If yes, please list name/names	YES	NO	
12. SEIZURES or LIGHT SENSITIVITY? Are you, or have you ever been, sensitive to lights or strobe lights had or been diagnosed with migraines or epileptic seizures?	, YES	NO	