

Services

Neurofeedback is offered on site at Lighthouse by trained staff.

A separate fee, negotiated with staff, covers each individual session.

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Lighthouse
Inc.



Lighthouse,
Inc.



**NEURO
FEEDBACK
TRAINING**

NEUROFEEDBACK

Neurofeedback is biofeedback for the brain. In recent years the technology has greatly benefitted from the development of computer resources. Since the late 19th Century, however, we have known it is possible to read the electrical activity of the brain. We can identify brain waves of different frequencies, and the brain can learn to change patterns of waves. Changing brain wave patterns can significantly affect the flexibility and functioning of the entire central nervous system.

In traditional biofeedback, a person learns to become aware of small changes in body temperature, heart rate, or muscle tension. The person then learns to affect those things in some way, such as increasing the temperature of the skin on one's hand or slowing one's heart rate. After consciously learning these techniques, the person then has to practice them regularly to maintain the skills involved.

Neurofeedback works directly with the brain and central nervous system, which has an immediate and profound effect on all body systems. The system Lighthouse is currently using for neurofeedback, *NeuroOptimal™*, works in such a way that the client doesn't have to learn or practice any skill, or do anything consciously. The client just relaxes, listening to music or watching a movie. The feedback is brief, almost subliminal interruptions in the audio stream. The brain does its own learning and adjusting to the feedback directly, at a much faster speed than the conscious mind works. As it adjusts and changes, the brain uses the information about its own functioning and activity to reorganize itself.

NeuroOptimal™ uses 16 concurrent, independent targets spread over the right and left hemispheres of the brain while training is going on. The software samples brainwave activity at 256 times per second for frequencies ranging from 0 to 60 Hz. It requires no conscious effort of any kind on the client's part.

There are 4 "Zengar modes" or levels of *NeuroOptimal™* training. Zengar 1, comparable to stretching before exercising, works with each hemisphere separately. In Zengar 2, the right and left sides are trained in relation to each other, requiring more integration. Zengar 3 is like Zengar 2 but is stronger. Zengar 4 works both hemispheres but allows for integration. If Zengar 1 is like stretching, Zengar 2 is like warm-up exercises, Zengar 3 is like an aerobic workout, and Zengar 4 is a "cool-down" stage.

