

# Training the Brain: New Developments

By JIM CHMURA

Research over the last 10 years has demonstrated that NEUROFEEDBACK can reduce and eliminate symptoms of ADD and ADHD. Recent clinical studies show significant improvement for specific LEARNING DISABILITIES, such as DYSLEXIA and AUTISM. At The Discovery Clinic many children with these and other learning disorders have been helped. With increased knowledge from research and better diagnostic tools, clinicians are now able to make improvements more efficiently.

At the Discovery Clinic the goal is to empower adults and children to achieve their full potential. This is accomplished by using neurofeedback to train the brain. Neurofeedback is a noninvasive procedure that simply allows a person to train his or her brainwaves to improve cognitive and behavioral functioning. This method is very effective in treating youngsters with attention disorders (ADD/ADHD), speech and language disorders, as well as mood and behavior problems. Ann Richman, speech/language pathologist, and Marty DeBoer, clinical psychologist, have joined forces to offer neurofeedback to their clients.

Between them they have almost 15 years experience providing this treatment.

How does it work? Our brain's electrical impulses can be measured through electrodes placed strategically on our head. These patterns are visible on a computer monitor. Clients at the clinic, with the assistance of a trained staff, play a video game with their brains. If the client is progressing and improving his or her brainwave pattern, the game moves faster, sounds continue and points accumulate. If there is no progress the action and sounds stop. By responding to these cues the brain learns new patterns and improves functioning.

Richman and DeBoer say they are not surprised to learn that several recent studies using neurofeedback training have shown significant improvement in children with autism and dyslexia. They also see progress in many clients with these disorders in their clinic. They report two cases as follows:

Alex, 5 years old, has a charming, outgoing personality, but his parents were worried because he avoided anything related to reading. Though they spent time every day doing reading readiness activities, he could not

remember the sounds of letters nor consistently rhyme words. His verbal expression was not clear and frequently he did not seem to understand directions. Alex responded quickly to neurofeedback training. Within weeks his sentence structure and clarity of verbal expression improved. He began to enjoy and succeed with the reading activities. He gained confidence and felt proud when he read two short books in front of the class. At home, life was more peaceful and happy.

Brian, 8 years old, is diagnosed with autism. Before treatment at The Discovery Clinic he rarely spoke but frequently emitted a loud barking noise. He was extremely hyperactive, climbing

and darting away frequently. His mother had to hold his hand when out in public to ensure his safety. Neurofeedback training for 6 months with Brian has helped him improve in many ways. He no longer makes the barking sounds and has started to make softer babbling sounds. He frequently says the names of friends or greets people with "Hi." He occasionally says new phrases such as "Help me," "I want more," and "OK, Mom." He is much less hyperactive and easier to control. Also, his play is more varied.

**For more information visit  
www.thediscoveryclinic.com  
Or call: (847)901-0909**



**Ann Richman,**  
M.A., SLP, CCC-L, BCIA



1306 Waukegan Road  
Glenview, IL 60025



**Marty DeBoer,**  
M.A., Ph.D.