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Charles T. Krebs, Ph.D.,  
co-author of *A Revolutionary Way Of Thinking*

## BRAIN INTEGRATION FOR LEARNING DISABILITIES

BY KAY RIOS  
PHOTOS BY WARREN DIGGLES

"Since the brain is unlike any other structure in the known universe, it seems reasonable to expect that our understanding of its functioning - if it can ever be achieved - will require approaches that are drastically different from the way we understand other physical systems." - Richard M. Restak, *The Brain, The Last Frontier*, 1979

To meet Charles T. Krebs, Ph.D., is to know you have met a brain science virtuoso. He has a unique gift for explaining complex brain functions, how learning disorders occur, and cutting-edge treatment strategies in a vernacular that regularly surprises lay people with how much they are able to learn from him. It is a gift Dr. Krebs has honed in 25 years as a teacher, research scientist, clinician, and inventor of acclaimed treatment techniques. So it is not entirely surprising it was standing room only when Dr. Krebs recently held a lecture at

Fort Collins' Bas Bleu Theater.

"Brain integration," he explains, "involves maintaining precise synchrony and timing of all brain functions to effectively process information and make timely decisions." That is the basis for the Learning Enhancement Acupressure Program (LEAP), which Dr. Krebs co-created with Susan McCrossin, a health practitioner in Boulder. LEAP, which Dr. Krebs has taught in ten countries around the world, is aimed at correcting learning problems such as attention deficit disorder (ADD), attention deficit/hyperactivity disorder (ADHD), and dyslexia.

The LEAP model involves an understanding of the latest scientific discoveries of how the brain functions. Popular models divide the brain into left and right brain, a concept that has been around since the 1960s when American psychobiologist Roger W. Sperry discovered the human brain has two very different ways of thinking. The right brain, he determined, is visual and processes information in an intuitive and simultaneous way, looking first at the whole picture then at the details. The left brain is verbal, processing information in an analytical and sequential way. This side first looks at the

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pieces and then puts them together to create the whole picture. Recent findings have shown that things aren't quite that simple and the brain is not as split as the explanation would have it.

Research has proven the human "bio-computer" is more complex than initially thought. Although specific areas of each hemisphere are responsible for initiating individual brain activities, such as math or reading, the reality is multiple areas of both hemispheres must be able to freely share information throughout the brain. That, says Dr. Krebs, is the definition of an integrated brain.

This explains, according to Dr. Krebs, why many people have learning and behavior disorders. "Any loss of integrated brain function results in the loss of a specific mental capacity and can result in learning disabilities." He likens it to how a car's spark plugs will misfire or sputter if the electrical timing is off. Similarly, if brain processing is not properly synchronized and free flowing, its ability to take in, process, and carry out critical information is compromised.

Symptoms of learning difficulties include inability to concentrate, demonstrated hyperactivity, poor impulse control, limited understanding of cause and effect, displays of inappropriate social behaviors, problems with reading and reading comprehension, with abstraction and math, and with short term memory. Behavior problems also appear when the brain is not integrated. "Children who are integrated control their behavior," Dr. Krebs says.

Stress is a large contributor to the loss of brain integration, Dr. Krebs maintains. "Brain integration is a continuum." He describes a spectrum running from "distressed" and zero percent integration at one end, where learning and mental tasks are difficult. The other end, at 100 percent integration, Dr. Krebs designates as "in the zone."

When people become stressed, loss of brain integration can be indicated by Dr. Krebs' long list of symptoms: a sense of being overwhelmed, inappropriate anger, inability to focus, muddled thinking, feeling fearful, difficulty sleeping, difficulty or inability to listen to or understand what you are told, Freudian slips or inappropriate social responses, extreme fatigue, and the inability to make decisions. "These symptoms let you know you have lost brain integration," Dr. Krebs says.

#### DR. KREBS' STORY

Dr. Krebs knows firsthand what it is not to function well. His personal history took him through a time when there was no integration of brain or body. Dr. Krebs completed his Ph.D. at the Marine Biological Laboratory in Massachusetts and ended up in Australia in the 1980s. He was 35, physically fit, and the picture of health. He ran daily, played volleyball and basketball, was a strong downhill skier, and practiced karate two to three times a week. An invitation to spend a week diving off a national park called Wilson's Promontory seemed perfect.

Dr. Krebs, a professional diver, and his friends began working to build up to a dive searching for the wreck of an old ship about 60 meters deep, the limit for scuba divers using compressed air. He had been that deep on several dives before, but this time something happened. He became anxious on the dive and, back on the boat, he began to lose control of his motor coordination. He realized he

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**Publisher's Letter**

Recently Nancy and Robert Evans contacted me to let me know Charles Krebs, Ph.D., was coming to town and they wanted me to meet him. After learning a little about him and browsing his book, I was convinced we needed to interview him for our Northern Colorado Medical & Wellness issue. This brilliant yet affable man, through his education and his own traumatic personal experience, had developed an important treatment modality for learning disorders. Best of all, he is establishing the Learning Enhancement Acupressure Program (LEAP) certification in Fort Collins and working with Nancy and Robert to develop the Fort Collins office as a hub of brain integration education. Not only is this good news for many children and adults afflicted with weaknesses in learning and attention deficit disorder, it is another important addition to the overall healthcare in our area. In fact, I am going through the program to improve my left and right brain integration.

**Technology Advances in Healthcare**

Healthcare in our region is undergoing a dramatic transformation. With a blend of traditional and modern medicine, the depth of the region's medical services is growing. We are living in one of the most advanced regions in the country. Enjoy reading this issue.

Emergency care also extends to pets. Pets often become ill at night or on the weekend. My Dog's Apix, being trained to share the past year when she punctured her eye and I found myself in a vet's office all night and day in surgery at 3:00 a.m. to save her eye. After much anguish and lots of recovery time, she is fine and just as curious and mischievous as ever. Read up on pet emergency care and clip out our ER list of vets for your refrigerator in case you might need a quick reference in a time of need.

Enjoy the sun as it peaks out between the summer showers.

lydia@lydiamedia.com *Lydia*

### See what Publisher Lydia Dody says about Brain Integration Treatment...

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Certified brain integration technique professional and founder of Open Pathways to Learning, Nancy Evans works on reading skills with a child at her office.



Evans has been invited to join Dr. Krebs in incorporating and leading his USA brain integration certification program.

was experiencing type two bends. One after another, portions of his body became paralyzed. After ten days of treatment in a decompression chamber he made some progress, but doctors thought he would never walk again since the nerves in his legs had been badly damaged.

A month after his accident, he began to work out for seven hours a day, trying to build up strength and muscle tone. He made slow progress, finally moving from a wheelchair to a walker. He had to practice balancing and had to remember how to walk. By the sixth month of rehabilitation, Dr. Krebs had moved to two walking canes. However, even getting dressed was a major effort and he had to catheterize himself four and five times a day. Despite this, he returned to work at the Victorian Marine Science Laboratory where he transferred to a desk job.

He soon realized something was wrong with the way his brain functioned. Work became increasingly difficult and he was required to have a neuropsychological assessment. The test showed that as well as spinal damage, he had suffered brain damage. He spent the next few years searching for a means to heal himself, to make progress back into a body and brain in which he felt comfortable. Through a series of events, he came in contact with a kinesiologist. What he heard made sense and he became convinced about the effectiveness of kinesiology. After two hours of acupressure and applied physiology techniques, 80 percent of the chronic back pain he had been suffering for several years was eliminated and he experienced dramatic improvement.

As he continued to work with the kinesiologist, he began to believe his muscles didn't work



Dr. Krebs (center) pictured with Robert Evans and Nancy Evans of Open Pathways to Learning, LLC.

because a "circuit breaker" had switched off in his nervous system. Those observations led to more work and more investigation into the reaction of his neurons in response to the stress of hypoxia. They didn't die, says Dr. Krebs, but went on standby until the energetic system could be reactivated. After more work, he was able to regain full brain function and, though he still walks with difficulty, he is far from incapacitated.

#### OPEN PATHWAYS TO LEARNING

That experience brought him to the concepts he incorporated into the LEAP approach. In the LEAP model, clients are assessed using two tools. The first is a means of accessing memory of past experience, traumas, or stress. "You can actually activate much of the same neurology that was activated by the original experience. For example, when you remember an argument, you often become angry again."

The second tool is direct muscle biofeedback with muscle monitoring or muscle testing. "Most of the muscle function is subconscious and it provides reliable subconscious feedback that can be consciously observed and felt," he says. "Using muscle monitoring, we can assess brain integration and its functional consequences."

Once the assessment is done, acupressure techniques can be applied to re-synchronize brain functions, defuse the stressful emotional issues causing the dysfunction, and reopen neuro-pathways so learning can occur and mental tasks can be more easily performed, he says.

Nancy Evans is one success story. Her daughter was diagnosed with ADHD. After trying medication, doctor visits, support therapy, and tutors, she came across brain integration treatment. Since treatment, according to Evans, her daughter is no longer on medication and has developed into a talented writer, where previously she had difficulty writing a single paragraph. A registered nurse, Evans became so convinced of the potential of brain integration, she became certified as a brain integration technique professional and, with her husband Robert, co-founded Open Pathways to Learning in Fort Collins.

Christie Hoffer's family is reflective of the kind of parent who seeks out Evans' help. When Hoffer's son was just five years old, he was diagnosed with ADHD and experienced trouble staying focused and being able to "just go with the flow" while in the classroom. A friend of Hoffer's, whose son was also diagnosed with ADHD and had found help at Open Pathways, invited her to attend one of Dr. Krebs'

lectures. Hoffer was intrigued by what she learned and immediately had Open Pathways evaluate her son.

"What convinced me to try Open Pathways more than anything was Nancy's honesty. She said, 'I don't know if I can help your son, but I can try.' We decided to do three to four sessions to see." Two sessions later, Hoffer and her husband saw a dramatic change in their son. "Especially with his reading. He went from reading at a normal kindergarten level to reading complete sentences." A year later, she reports, "This has been life-changing. He has calmed down, has more focus, more interests, and is more able to just go with the flow, a 180-degree change."

His teachers have since recommended him for gifted and talented programs and Hoffer says she cannot thank Open Pathways enough. "This has been a bigger help than just medication and it is permanent," she says. "The biggest thing I tell people (who ask about Open Pathways) is to be open-minded. We tend to have a fear of Eastern medicine, thinking it is mumbo jumbo. This is much more than that."

#### THE FUTURE OF BRAIN INTEGRATION THERAPY

Dr. Krebs recently invited Nancy and Robert Evans to join him in incorporating and leading his USA brain integration certification program. "We were honored that Dr. Krebs invited us to join with him," says Evans. She will take on the role of Admissions Coordinator and Robert as Business Director. "He has been impressed with our practice and leadership in creating the Learning Solutions Network of Northern Colorado. The good news for Northern Colorado is that we're now positioned to become the national hub of brain integration. National and international learning disorder experts

and teachers will be heading our way and families and health professionals in our area will definitely benefit!"

Dr. Krebs says his plans for the future involve getting his work to people in the mainstream. He does, however, caution that this is not a fix-all. "If it is organic damage, like extreme autism, this may not be able to correct it. Brain integration is like a software fix, but it can't fix a hardware program."

He also says it is not a stand-alone approach. "I've worked with speech pathologists and other health professionals for years. My technique prepares people for learning and for functioning. After their brain is integrated and they're not working with faulty pathways, then other professionals can work with them more effectively."

Scientific research of why and how brain integration achieves its results hinges on future funding. Currently, complementary and alternative medicine modalities are largely overlooked in research. However, Dr. Krebs has succeeded in attracting the attention of learning disorder medical specialists in several areas of the world. A recent Haifa University control group study of learning disabled children in Israel produced impressive data on the success of brain integration. The study can be reviewed on Open Pathways' Website, [www.openpathways.org](http://www.openpathways.org). +

*By Kay Rios, PhD., freelance writer based in Fort Collins*

*Information about Brain Integration Treatment is available by contacting Open Pathways to Learning at 970-416-6330 and at [www.OpenPathways.org](http://www.OpenPathways.org).*

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