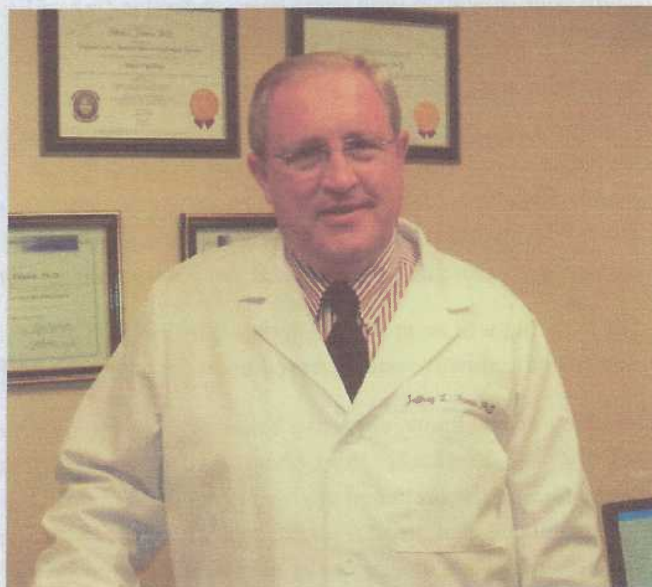


**Jeffrey L. Fannin, Ph.D.**, is the Founder and Executive Director of the Center for Cognitive Enhancement (CCE), located in Glendale, Arizona near Phoenix. I wanted to write a few lines to get acquainted and tell you about some of the incredible research that Rob Williams, Raes Carroll, Angela Howard (a Certified PSYCH-K Healthcare Practitioner), and I have been doing. I have been devoted to the complex practice of mapping and analyzing the brain and training it for optimal health and performance for nearly 14 years. I am board certified in neurotherapy and have been using my experience with head trauma, stroke, chronic pain, Attention Deficit Disorder (ADD), Attention Deficit/Hyperactivity Disorder (ADHD), anxiety disorders, depression, sports performance, neurofeedback therapy, trauma recovery, brainwave entrainment for personal achievement to improve brain function and enhance mental and emotional dexterity. You can learn more at my website: [www.enhanceyourbrain.com](http://www.enhanceyourbrain.com)

**Plato said, “The ultimate limits of the human mind are surpassed only by what the spirit may learn.”**

Advances in the technology to measure the brain and our understanding of neuroscience over the last few years now allow us to pinpoint individual aspects of thinking and relate them to behavior patterns. I continue to be involved in brain research as part of a research team studying the neuroscience of leadership at Arizona State University. Part of our work has allowed us to do research at the United States Military Academy at West Point for nearly four years now. We have been able to look at things like complexity of thinking, identify what we know as psychological capital and continue to look at why we do the things we do as human beings, as leaders and as followers. We have been recognized internationally for our work and continue to examine interesting and useful questions.



Rob and I found that our individual sojourns had exposed us to similar things and felt that our connection and work together at this time would be profound and intriguing. It has been exactly that, adding an excitement that gets us sometimes giggling out loud about what we are doing. Prior to meeting Rob, I was setting up an extension of our office in Omaha, Nebraska with Angela Howard, a nurse specializing in holistic health. She thought it would be interesting to do a PSYCH-K balance with me. Being the mad-scientist that I am...of course I agreed but thought we should do a little pre and post brainmap test. Angela did a set of EEG (electroencephalogram)



baseline measures with me prior to doing PSYCH-K. After the PSYCH-K, she did a post set of EEG readings. After I finished processing them with different programs to convert the raw EEG data into a QEEG (quantitative electroencephalogram), I was astonished at the results. Angela talked to Rob about what we had found in our little experiment (I will show the results later, keep reading). Rob and I began to talk. In our initial discussions we wondered if EEG technology could record changes in brainwave energy as it relates to PSYCH-K balancing. We decided that we needed to get together and see what would happen. Since it was February, I argued that Phoenix is warmer than Colorado right now and he should come here...he and Raes came to Phoenix.

After a couple of days of discussion on what *and if* we should even do what we were talking about...we all agreed that it was something that we had to explore and report regardless of the outcome. We did some pre and post EEG with some of my patients that agreed to also experience PSYCH-K. We also decided that we wanted to see if the technology would record changes in brainwave energy during surrogation. To say that the findings were astonishing is putting it mildly! We have decided that we would like to share some of those findings with the PSYCH-K community. Some of you may not be familiar with EEG or brain mapping, let me begin your education with some basic understanding of EEG and brainwave technology.

#### **WHAT IS BRAINMAPPING??**

Electroencephalography (EEG) is truly an interdisciplinary endeavor, involving concepts and techniques from a variety of different disciplines. Included are basic physics, neurophysiology, electrophysiology, electrochemistry, electronics, electrical engineering, biology and neurology. To work with clinical EEG, it requires some understanding of each of these disciplines. See my website for a more detailed explanation: [www.enhanceyourbrain.com](http://www.enhanceyourbrain.com)

The data that will be presented here is our first endeavor to see if EEG equipment can measure changes in brainwave energy based upon the principles of PSYCH-K.

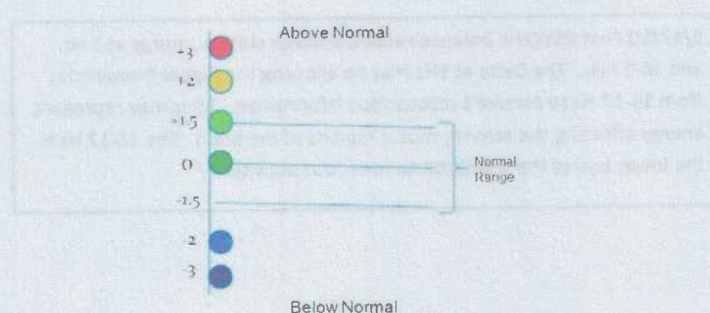
As many of you know, cognitive behavioral psychology has demonstrated that *action* follows *thought*. We do what we think about. Thoughts are patterns of energy translated into frequencies in the brain and are then distributed to different areas of the brain by a network of neuropathways that affect thought, memory, emotion and many other brain functions. If neuropathways are inadequate or not functioning correctly, the intended result will not be present. In my clinic, I use electroencephalographic (EEG) waveform equipment to focus on brain patterns to determine where to make necessary changes in a person's brainwave activity to create optimal performance affecting attitude, emotions, behaviors and other factors. In essence, we train the brain for optimal performance. It appears from our preliminary research that PSYCH-K affects the neuropathways in the brain faster but QEEG brainmapping offers a reliable scientific report showing that the changes have occurred. Brainwave technology records information by frequencies, commonly called *hertz* (Hz).

There are many frequencies produced in the brain all the time, each having a different function or contribution to the operation of the brain. There are six major frequency ranges of the brain that we measure and depict in typical brainmapping activity. Even though I could expound on each category's function, we will keep it simple for now. *Delta*, most dominant in the sleep state, it is measured from 1 to 4 hertz (Hz); *theta*, a deeply relaxed state and often the state for creativity and meditation, sometimes referred to as a hypnogogic state or the place where our beliefs are stored, it is measured at 4 to 8 Hz; *alpha*, a slightly less relaxed state becomes the bridge between unconscious and conscious thought is measured at 8 to 12 Hz creating "sensorial rest" being alert but relaxed; the frequencies that deal with our sensory processing and our physical movement we call our *sensory motor rhythms* and is measured at 13 to 15 Hz; *beta*, our waking consciousness and thinking activity measured at 12 to 30 Hz; there is also a mid-range *beta*, around 12 to 15 Hz that assists in our ability to attend to things; there is also a hyper state of arousal that has to do with our awareness and vigilance and is measured as high as 35 Hz; the *gamma* range assists in many of our higher functions such as complexity of thinking and adaptability, as well as some of our more desired emotional states like *joy*. It seems to be a reasonable assumption that if you can use this technology to measure energy in the brain, then we should be able measure a change in that energy in the brain. This hypothesis is what has lead to our examination of measuring changes in the brain wave energy as it relates to PSYCH-K principles.

### PSYCH-K Brainmapping Research

On January 17, 2010 in Omaha, Nebraska an EEG was performed by Angela Howard with me. I will not show all of the information related to the brainmaps and other EEG information. Not because I don't want you to see it, there is simply too much information to absorb and put into some basic understanding. Therefore, I will offer you one map that represents the results of this experiment.

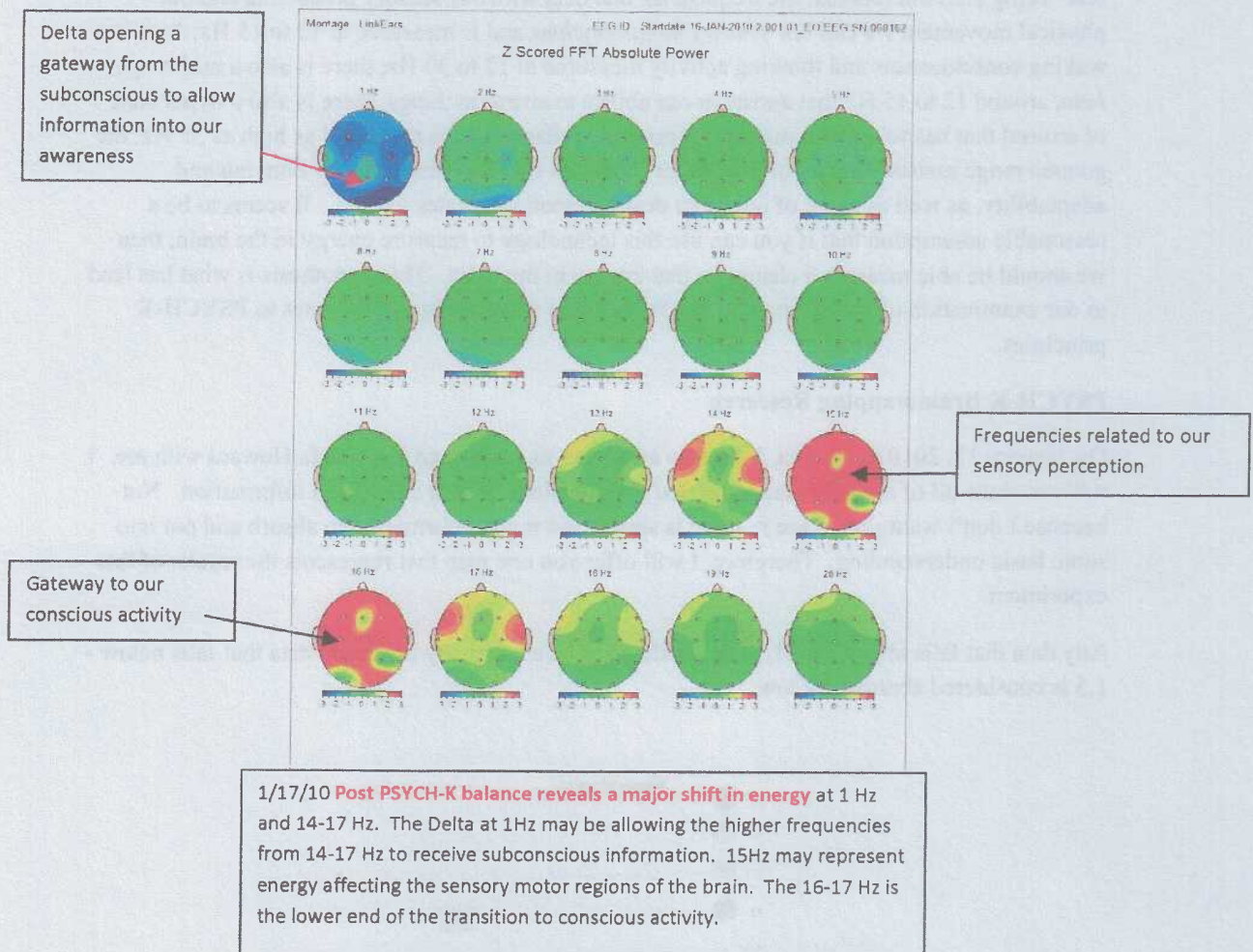
Any data that falls above the +1.5 is considered to be abnormally high, any data that falls below -1.5 is considered abnormally low.



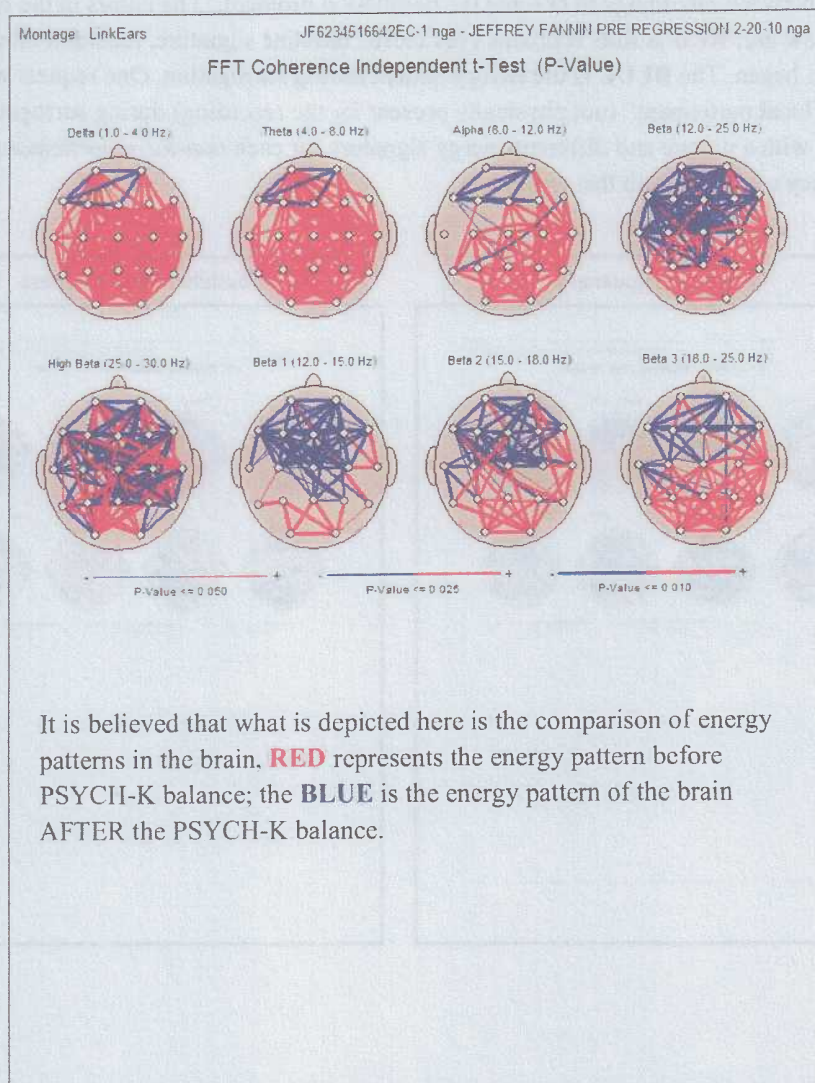


The colors depicted on the graph relate to the colors on the following brainmap.

A PSYCH-K balance was performed on January 17, 2010 followed immediately by baseline EEG converted to QEEG brainmap. This was a dramatic change from the pre PSYCH-K brainmap executed on January 14, 2010.

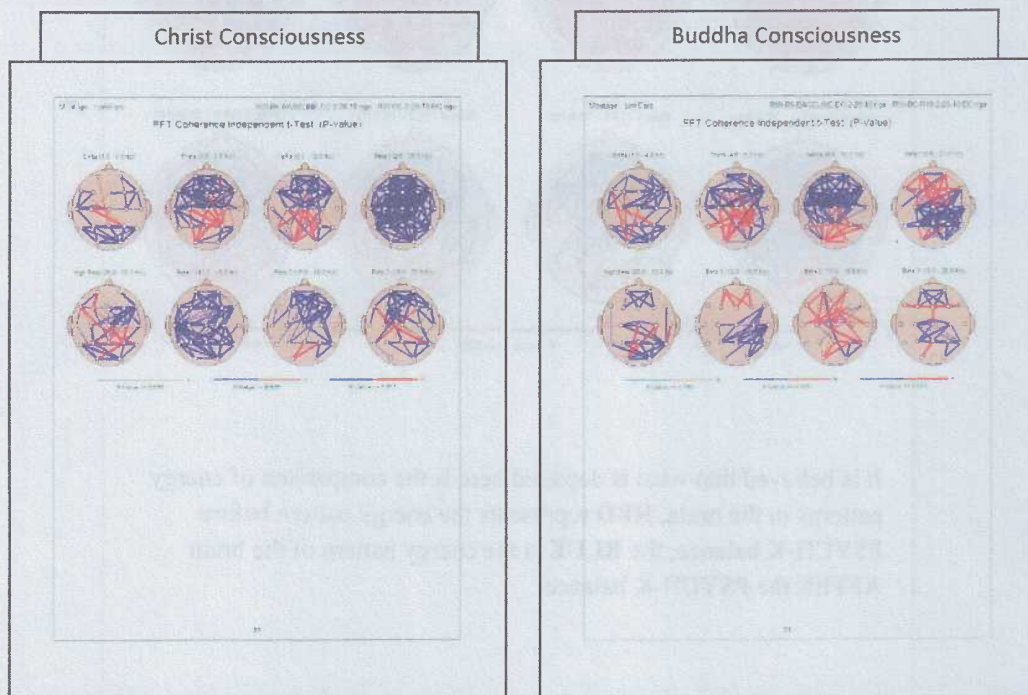


The depiction below is a complex independent t-Test based upon my pre and post PSYCH-K balance. Millions of data points were compared in this process. In all of the following independent t-Tests the depictions you will see in this report, **RED** related to the pre PSYCH-K balance and the **BLUE** color is the energy pattern after the PSYCH-K balance. These results leave little doubt that something significant is definitely going on as a result of the PSYCH-K balance.



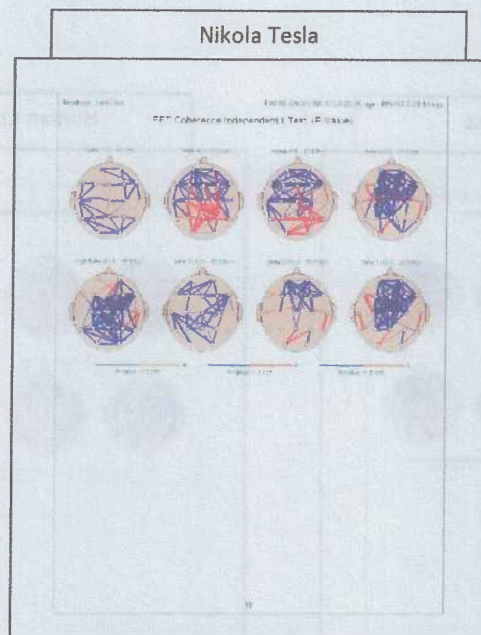


Given these findings, it left us with a curiosity knowing the power of PSYCH-K in surrogation and wanting to see if there would be any difference during the process of surrogation. It was decided that we would record several in succession. Before each recording a permission protocol was performed. Rob Williams was the surrogate and the permission protocol was performed by Raes Carroll with me doing the EEG set up and recording. Recordings were done consecutively with 5-minutes of EEG data recorded for each surrogation; only pausing long enough in between recordings to execute the permission protocol. The colors in the independent t-Tests below are: **RED** is Rob Williams eyes closed baseline signature, recorded minutes before surrogation began. The **BLUE** is the energy pattern during surrogation. One request was made of each "non-local participant" (not physically present for the recording) during surrogation; to provide us with a unique and different energy signature for each *non-local participant*. As you will see, they complied with that request.









We also had several of my patients as volunteers in our clinic in Glendale, Arizona who were willing to experience PSYCH-K in surrogation. A baseline EEG was performed by me prior to the patient volunteer talking by phone to Rob Williams and Raes Carroll in Colorado. PSYCH-K in surrogation was performed, I was notified at that point, that a post-surrogation EEG was done. The independent t-Test below demonstrates the incredible before and after surrogation balance. **RED** is pre PSYCH-K surrogation, **BLUE** is the dramatic change of post surrogation.





There are many other cases and other EEG information that we would like to share, and will do so in the near future, but right now do not want to create confusion and a lack of understanding for a phenomenon that is ready for scientific measure and scrutiny. It is early in the research process, but it is clear that there is some phenomenon present that is unique, consistent and measureable with a high degree of accuracy and statistical relevance. We are as certain as one can be at this stage that we will be able to demonstrate with great accuracy, a scientific evaluation that you already have known anecdotally from seeing changes in the people that experience PSYCH-K. **Now there is concrete scientific validation that the changes are actually occurring in the brain!**

