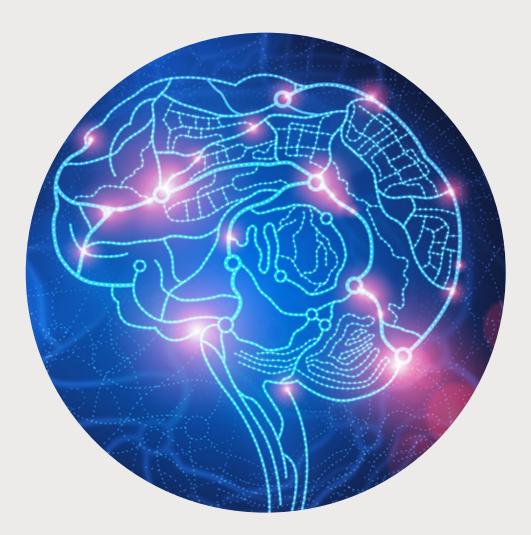
# THE BRAIN TUNER NOBERT C. BECK, D.SC.



Excerpts from an informal talk in 1983 to introduce his newly developed **Brain Tuner.** 

**For more information** on the Beck Protocol, the Brain Tuner, Bob Beck and a database of testimonials:

www.bobbeck.com

© 2002, 2015 Natural Health Productions Inc.

www.natural health productions.com

# **TABLE OF CONTENTS**

History of Cranial Electrical Stimulation (CES) Technology and The Development of the Beck Brain Tuner, 1983	61
The Addiction Withdrawal Process	
The Politics of Health and Addictive Substances	
Research on Addictions and the Brain Tuner Technology	63
Bob Beck's Decision to Design a Brain Tuner	64
Research with Frequencies	64
Beck's Brain Tuner Frequencies	64
TENS Devices and the Politics of Health	67
Early Research Studies	68
Bob Beck's Early Research	68
The Mind as a Hologram	69
Use of The Brain Tuner	70
Placement of the Electrodes	70
How It Should Feel	70
Length of a Session	71
Side-Effects	71
Other Benefits—Memory, Depression, Anxiety, Insomnia	71
Learning Disorders	72
Pain Relief	72
Why Bob Beck did not have his Brain Tuner FDA Approved	72
Success Stories with The Brain Tuner	73
Book References	75
Magazine Excerpt	75
Beck's Bibliography of Cranial Electrical Stimulation Research, 1983	76

**The content provided** in this publication is for informational purposes only and is not intended to diagnose, treat or cure any medical condition. Please consult your health practitioner. Government regulators say that testimonials are misleading and deceptive. Results are not typical.

### **Research Studies**

Please note that the research and studies referred to during the talk given by Robert C. Beck, D.Sc. are not specific to the Brain Tuner. The research bibliography referred to is specific to Cranial Electrical Stimulation (CES). This is the technology on which the Brain Tuner is based. The bibliography Bob Beck refers to is on page 76 to 79.

### **For more information** on the Beck Protocol, the Brain Tuner, Bob Beck and a database of testimonials:

www.bobbeck.com

© 2002, 2015 Natural Health Productions Inc.

www.naturalhealthproductions.com

# History of Cranial Electrical Stimulation (CES) Technology and the Development of the Beck Brain Tuner, 1983

Paul Tyler, who was at that time Chief of the Defense Nuclear Agency, Radiological Defense, usually picks me up at the airport in Washington and takes me back to the plane. In February he said, "Bob have you seen the article in the January Omni magazine on Meg Patterson's magic black box?" I said, "Ya." He said, "Well aren't you interested?" I said, "Ya." He said, "Well while you're out in California," he said, "why don't you look her up and see if there's anything we can do for her to get this thing broken loose and into the mainstream." Now this was an honest effort by Paul Tyler … to be of assistance to Meg. So when I got to Los Angeles I gave her a call, introduced myself …

She said, "Well I cannot talk to anyone, I have a contractual arrangement with the NET" (Neuro Electric Therapy Group). At that time they were near the John Wayne Airport. "But under the circumstances we can call a meeting."

Well this was, perhaps, one of the most remarkable meetings I have ever attended in my entire life. At one end of the table was the principal investor who at this time had raised about  $3\frac{1}{2}$  million dollars to develop the "Black Box Brain Tuner" ... the neural electrotherapy device. There were three of the staff scientists and the president of the financial company called TLC. A very bad analogy, the middle word was leverage, I think it was Turner Leverage Corporation, it had nothing to do with tender loving care. Meg had been brought to this company in August of 1981 to develop the device, which had been built for her by Shackman Instruments in England.

The history of this is that Meg Patterson, while working as an abdominal surgeon at the Tung Wa Hospital in Hong Kong, had come across Dr. Wen and his use of electro-acupuncture for anesthesia. Dr. Wen had discovered, quite accidentally, that many of his patients were on heroin. At this time 1970–1972, a \$500 a day habit in the United States would cost less than a pack of cigarettes in Hong Kong. And about 20% of the gross population that would go through the Tung Wa Hospital in Hong Kong were heroin addicts. So doing hundreds of surgeries a month, a certain percentage of these people who were heroin addicts began to report, "I'm not feeling any discomfort. I don't have withdrawal pains. I seem to have an altered state." They would go back on the street after surgery, get a fix from their usual 'mother' and find that the fix had not given them the same effect. There were a number of fights because they thought their heroin was being cut, etc., but it was a very interesting political situation.

### The Addiction Withdrawal Process

So, Dr. Wen did what any good scientist would do, he began doing rat studies. Mega rats. I'll digress for a moment here and say that heroin or opiates as a class—opium, morphine, heroin and the number of the synthetics that are manufactured in the ethical pharmaceutical houses—simply overload the body's production of normal endorphins. Betaendorphins was discovered around 1975 as a painkiller that the body manufactures. It is about 100 times as effective as morphine as a painkiller. When you don't have it you get the aches and pains, the withdrawal, the stomach cramps, the nausea, the insomnia, all of these horrible things that attend withdrawal. When you give your body massive doses, or even small doses in the beginning, of any of the opiates the part of the brain that says, 'build neural transmitters,' simply says, 'shut down we have too much.' So, when you get off of the substance, when you try to kick it cold turkey, the body is in agony because those little factories in the brain simply don't produce the endorphins. The word endorphin comes from en: endogenous and orphin: after morphine. It simply means endogenous or builtin morphine. About five or six years ago there were some 40 known neuro-transmitters, seratonin being one of the most famous. At this time there are over 2,000 that have been identified and they're still counting. So, the brain is an exceedingly complex little factory. Remember the days in school when they said, "Well you're worth about five dollars, you've got two pounds of salt, some potassium, some carbon, some hydrogen." Try to buy a gram of interferon for under 8 to 10,000 dollars. The body is far more complex than this set of chemicals that we held so dear in grade school.

What Dr. Wen did was to hook rats on heroin, have two groups: one control and one active. He would cut off the heads of the rats and run chromatography (electrophoresis chromatography) to find out what some of these trace proteins were in the control and the sample. The control group, the rats that had been hooked on heroin and suddenly cut off were pretty miserable rats. They showed that it took maybe a week to three weeks before the neuro-transmitters would again reappear—the exact range of time that the withdrawal symptoms occupy somebody coming off the narcotic. The rats taken off heroin cold turkey and then with two little clips ... were given electro-stimulation around 111 hertz ... showed that within 40 minutes of the time that the voltage was applied, the brain's ability to produce it's own neuro-transmitters had been rehabilitated and that within three to five days it had reached normal. [Editor's note: Please note we do not support research on animals unless the animals are already suffering and they can be helped with the application of a therapy.]

### The Politics of Health and Addictive Substances

Now the implications of this were rather stunning. How many people do we have in this country who are on Valium uppers, downers, legal narcotics that are highly addictive? You probably remember that during the American Civil War, when morphine was invented to replace some of the other opiates, they said, "Oh, here we have a pain killer that is totally non-addictive." They've said this about almost every other drug that has seen the light of day. In fact, boys and girls, if it isn't addictive they don't want to sell it. Did you realize that there is a 13.6 billion dollar legal pharmaceutical trade in mood-altering drugs such as Valium? And that there is about a 20 billion dollar market from the same drug manufacturers in the United States that exported to Mexico where they do not have these pharmaceutical controls—prescriptions—which comes back onto the streets of the United States? That is close to 36 billion dollars a year at the retail level. Now nobody wants to interrupt this trade.

Tobacco is 4½ times more addictive than heroin. This study was done here at the Veterans Administration Hospital, Sepulvida, by Dr. Krober in 1974. It had been found that GI's coming back from Vietnam who had several habits tobacco, heroin, others, could be gotten off heroin within 72 hours to a week. But it was almost impossible to get them off of tobacco. So a study was done which established that the withdrawal time on tobacco could run up to two years. That it was 4½ times more physically addictive than heroin—this is hard core scientific data. Would you like to see the American tobacco companies stop paying taxes? Their net is around 27 billion dollars a year. These are big dollars.

People ask why these devices are not exactly legal in the United States. Well, getting back to the story, we came to this conference table hoping to exchange some information. I passed along to Meg and the rest of the people (who must remain nameless ...) the fact that Paul Tyler was willing to assist this group in getting this device going. Now, since she had been in this country, they had raised  $3\frac{1}{2}$  million dollars to build a prototype. At the time that I met with these people in February of 1983, not one device had been built. Meg had been in California since August of 1981.

So I asked them, "How's your patent status?" They replied, "Well, we realized that once we patent it we've given the secret away, so we plan on using the strategy of continuance in part." If you know what this means—in other words they would continue to modify the patent as long as possible with continuation amendments so as not to get a patent. That meant that they had no patent. "Well what is the status of your prototype?" Again they responded, "Well...we're, yada, yada, yada..." I then asked, "Well are you going to sell these devices?" Response, "Uh, we don't know, we think we're going to lease them." Next question, "Well how much?" Response, "Well we'll put a price tag of about \$50,000 on each box and the doctor, as stated on the franchise agreement, will be required to charge the person \$8,000 if he has no insurance for 10 days use of the box. \$10,000 if he has insurance coverage. I have the letter here that went to the franchisees. And yet they had no boxes. A number of people had bought territory for this including William Parker of the Parker Holistic Health Center and a number of other people that by this time I had met. They had been promised delivery of the Brain Tuners by December of 1981 and here we are into 1983 and not one box had been delivered. Some strange things were happening here. And after listening to this for about an hour, I was prepared, I had armed a briefcase.

I had devices which I had acquired, had smuggled into the United States from the USSR, from Finland, from Germany, from England. I still have some of these. We have the original devices that have been used by Dr. Wen in

Hong Kong. In other words the grandfather of the Shackman Instrument device that Meg had used at the Pharmacon clinics in England. So, it turned out that the investors who are at this table were not even aware that this technology was over a hundred years old, had been used in the Soviet Union for over 20 years, and had been used on the continent for 15 years, and in Great Britain for 10 years. They thought that they had an original idea, which might have been patentable. These devices could absolutely rock the boat of the pharmaceutical drug industry, the liquor industry, the tobacco industry, the doctors who make a great deal of money. ... Why are these not being used, for example, in alcoholic rehabilitation centers?

In 1969 some friends of mine, new friends—I didn't meet these people until I started researching this area—had heard about the generic term "electro-sleep" that was being used in the Soviet Union for addiction and alcohol control. The government gave these people a little money, sent them to the Soviet Union, and they came back with one of the original devices that were used for "electro-sleep." It seemed that the Soviets had trouble with Generals who drank too much vodka. And at this hospital in Washington, which is a household word, they were treating American Generals who had the habit of too much scotch, bourbon or gin. They brought the device back to the United States in late 1969 or early 1970 and began using it in the hospital with addicts. It's one of the most fascinating psycho-political stories that emerged during the five months that I was actually researching this data. The CIA came around and said, "What are you doing?" My friends said, "Well, we have this electronic device which apparently is restoring short-term memory loss." The CIA said, "You can't do that."

The people who were working on the project were dispersed. They took the device to Garland, Texas to the Vero Instrument Company. Now Vero builds the high-technology equipment. Vero builds skunk-work devices like starlight scopes, infrared viewers, high technology microcomputers. They're one of the highest tech, government secret-agency suppliers in the world. The vice president of this company split off and founded a corporation called NeuroSystems Incorporated. And brought out a beautiful little device, which until recently was the Cadillac of the entire field, about the size of a pack of cigarettes that absolutely cured addictions. They thought, "Wow we're going to have markets for this." They never got FDA approval. It's been 14 years. FDA grandfathered them under section 510K of the 1976 Congressional Act. They still said, "Hey if we take this around to dry farms, namely alcoholic rehabilitation centers, there should be a tremendous need for these." Now in California alone there are about two dozen—it's a big industry. He knocked on doors and there was very little acceptance. Finally, a fellow who had worked for one of these dry farms told him the secret. He said, "You know if somebody comes in here who has good insurance, we can run up about a \$9,000 bill on laboratory tests alone — pathology, kidney test, blood test, you name it. He has to be in here for at least a week and a half to 14 days before we break even on our television-advertising budget alone. The person gets glossed up, the family's happy, he goes back to work. 75% of them will backslide within six months. You come in here with a device that will totally restore them in five days? Why, we are a franchise, we are here to make money for our stockholders, get out of here you bum."

### **Research on Addictions and the Brain Tuner Technology**

Now fortunately they had spent a great deal of money in absolutely and totally documenting the effects of this little device. They found that it reversed Korsakoff psychosis in three to five days with chronic alcoholics. This work was done at the University of Wisconsin Medical School, at the Louisiana Medical College and at the University of Texas. Now any of you who've dealt with alcoholism know that it normally takes eight years for the short-term memory to be restored—eight years of total abstinence. The short-term memory profile of an alcoholic absolutely pinpoints the amount of degeneration. One of the tests is the maze test, where you have to go through a maze without lifting the pencil from the paper. The other is the beta section of the test where you have to look at words on one page, then the page is taken away and you have to remember it on subsequent pages. An alcoholic will usually show a profile of almost total inability to pass these two facets. In all of their subjects, I don't like to say all, it's rather spooky, 99% of them—they were able, where they had a baseline of tests, for example, where the person had been to college, had taken this same or a similar test and had become an alcoholic for 15 years, where they had access to the original records, the short-term memory was totally restored in five days of using this little box 40 minutes a day. Now this is wild and wonderful. All of this emerged during some of the research. I spent quite a bit of time in the bio-med library

of UCLA, some time at the Marris library, USC County. Some of the papers, particularly the work done in the Soviet Union and in the Orient, were only available at the national medical archives at Bethesda, Maryland. But, I have compiled a bibliography—it isn't in the final form—and any of you who are health professionals can get a copy of it. I'm still trying to get it on the word-processor and there's an explosion of information in electro-medicine lately, as anyone knows, and I try to update it. So, every week my friends send me at least another dozen references on this particular topic. [See page 76 for the bibliography.]

Now it became apparent after spending a great deal of time with Meg that nothing was going to happen in this particular sector. She had her engineers come down to her little house on Fernleaf and I spent many an afternoon with them explaining what I had found independently—explaining the difference between constant current and constant voltage, etc. The only device Meg had brought to this country was the Pharmacon, which we were able to thoroughly instrument, analyze and document. About the size of the original Sony Walkman tape recorder. This is the device that was used on Peter Townshend when he was flown in on a hospital bed type airplane to the John Wayne Airport. He had taken a massive dose of heroin before he left London, enough to get him to the States. He was absolutely green and yellow when they took him off the plane, when Meg put this device on his head, and within about 40 minutes, of course all of you have read this story—it's been reprinted in Penthouse, it's been reprinted in Omni magazine, he was rehabilitated—after he'd spent a fortune in various clinics around the world. Peter Townshend finally got off, kicked the habit and is now happy, healthy, clean, producing again and all of this is history. At any rate, they were getting results with the device as primitive as it was and it began to appear that the Neuro-Electric Therapy Group, the magnet group were not going to produce anything. They were either unable or unwilling to do it. ...

By the way, Meg's reason for not accepting the government's offer was that she wanted an entirely new category. Paul had conveyed to her that "If you will come in under the grandfather clause, it will get you approval by the FDA, which will permit animal and human experimentation." Meg absolutely and totally refused to do this. She wanted a new category for neuro-electric therapy, not realizing that this category had been preempted by CES, which is Cranial Electro Stimulation and a long list of generic terms. We tried to explain to Meg that since Reagan there are only under 300 investigators still working for the Food and Drug Administration and this is an accurate figure. There are over 80,000 devices awaiting their investigation and approval. If you have another 5 to 6 million dollars and ten years to wait—even if we get you at the front of the list—it's not going to fly. But she absolutely insisted that she would not come in under the grandfather clause for a TENS unit. Although these devices do a great deal more than any TENS unit, they cannot make claims for what they actually do because this would put them in a new category. And this means human and animal tests, certification, all of the research that goes on and on and takes a tremendous amount of money.

### Bob Beck's Decision to Design a Brain Tuner

### **Research with Frequencies**

So, I decided, "Well let's research this thing a little bit further and bring out a box that will do some good." Which I did. I gave away a number of these to friends and used them as guinea pigs. It worked, and we feel it is vastly superior to the \$50,000 Pharmacon device. ...

Now there are three other magic numbers, which caused the rejuvenation, the healing, rapid re-stimulation of the neuro-transmitters. These were developed on another government grant program and I am not at liberty to tell you what they are. ... [Bob later revealed he was referring to the frequencies of three neurotransmitters.]

### **Beck's Brain Tuner Frequencies**

We did very elaborate spectrum analysis work on all of the units that we could beg, borrow or steal. These are computer printouts, spectrum analysis sheets, of over two dozen brain tuners ... We found the majority of these devices were hit or miss—they didn't have the magic numbers but they had enough fairly rough harmonics. You know, it's so ridiculous for the people selling these devices to claim certain frequency effects. How many engineers do we have here? Well, you've played around with radio, uh, frequency is a useful term only if you're dealing with

coherent waveforms such as a sine wave. If you have a square wave, by definition a square wave has an infinite number of odd harmonics, right? That's what a square wave is. So that means if you put a 10 Hz (hertz) square wave into somebody, you have every other odd harmonic of that from DC to light if it passes the system. Is that correct? So here are people putting out square wave boxes that they say will tune from X number of hertz to X number of hertz and they're looking at the pulse repetition rates and confusing them with the frequencies.

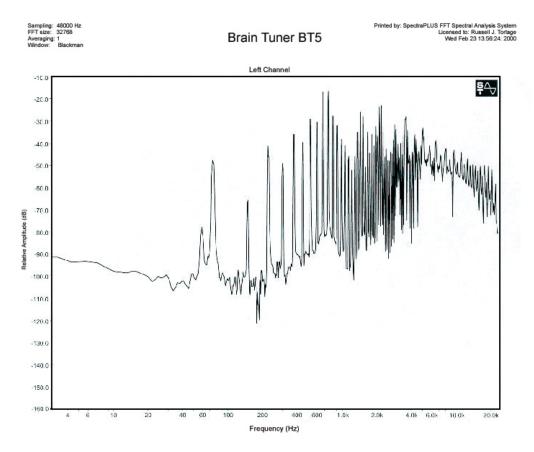
Now these are things we find absolutely abhorrent, ... Well, we hope that in these years where more and more people are talking about electronic medicine—which has to be the medicine of the future—that some of these basic misconceptions will be clarified ...

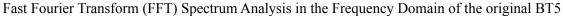
So we began experimenting in earnest. Thank God I had access to an IQS Model 401 Spectrum Analyzer which is probably the most advanced thing that I could get my hands on for under \$50,000 at Hewlett Packard. And then we began looking at these frequencies in earnest. We eliminated the need for ever tuning the device. How many of you are familiar with the AccuScope? I'm going to use this as an example. Terry Fisher, like the rest of us, realized that perhaps the most innocent people with whom you can deal are medical doctors. And here are these two dials that have various frequency settings, and the doctors very seldom read instructions. So Jerry came up with a marvelous idea. He got some different colored scotch stick-on masking tape and cut little dots that are red and orange and green and yellow and paste these dots on the dial. Now we can tell the doctor match up the yellow dot with the yellow dot. This made it almost idiot proof and so there was no need to talk of specific frequencies ... which is ridiculous when you're dealing with anything other than sine waves, anyway. You match the dots. He would come back months later and find that the device was still set on the same dots as when he walked out of the office and it was working fine. So everybody was happy.

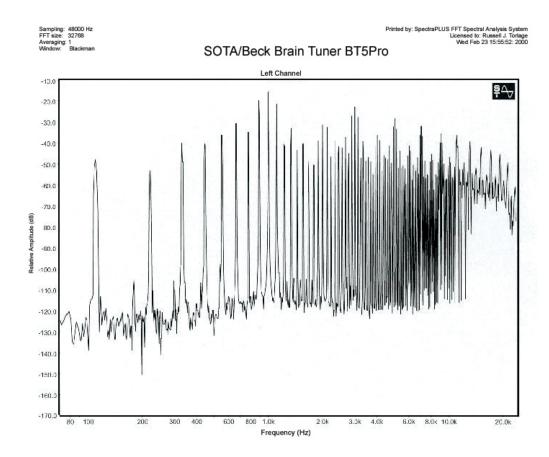
All of this apocrypha is now being replaced by hard science in these conferences. I've attended a number of them. They say electricity is the thing which makes you better, etc., etc. At any rate this was the political state of affairs in 1983 when a lot of people who did not know the difference between frequency and pulse repetition rate and had never heard of heterodynes and harmonics, were looking for the Holy Grail. The way they normally did this, they put the box on the dope addict and they would just juggle a dial and say, "How does this feel, how does this feel, how does this feel?" It was a fairly empirical process. How many of you read the Omni article in January 1983? You notice there that the main secret of making the person better was to twiddle the knob because at that time they did not know what the frequencies were. It has been fairly well established that the beta-endorphins are stimulated with a pulse repetition rate of between 90 and 111 hertz. The catecholamines at around 4 hertz, the enkephalins at another number, etc., etc. This work has been very well documented and very well replicated by a number of scientific laboratories. So what we decided to do in, our box, was to put all of these frequencies simultaneously. Now some people said, "Well, shouldn't you do one and then another and then another." And it's turned out not to be this way at all. If you have a Hi Q circuit you can put white noise into it and ring the filters, right? And the brain is an exceedingly Hi Q circuit. It appears to have a Q in certain of the neuronal constructs of around 3,000. Which is amazingly high.

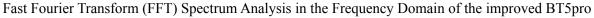
What is Q? Q is the figure of merit. Q means the band pass versus the energy required. A crystal set will get all the radio stations in the area at once. A super heterodyne or TRF will get narrower and narrower bandwidth. If you have a triple or double conversion super heterodyne, you can separate two stations that are within a kilohertz of each other. The difference between those is the Q of the circuit, which is tuning to the signal. The higher the Q the lower the band pass, the less the interference.

We have all of the frequencies simultaneously. This generates a sine wave of ten hertz at millivolts and it requires about 25 volts minimum threshold to stimulate them. We use all 200 frequencies. Would you like to see the spectrum analysis of this? We put them in bundles. We think that some physiology, for example an old person and a young person might have slightly different frequencies. So when we are hitting the beta-endorphins we center it. For example if this is the target frequency, we put out enough on each side of it in these three magic ranges: encephalon, catecholamines and beta-endorphins. These seem to be the most active known neuro-transmitters. We've used a bit of a shotgun approach instead of a rifle. When we work the lower frequencies for the catecholamines, each one of these clusters show the simultaneous frequency spectrum by Fast Fourier Transform (FFT) each millisecond. In each one









thousandth of a second, this bundle of energy is supplied to the points. Now it was rather difficult to do that because we had to buy reverse Fourier transform, find out what fundamentals would recombine and heterodyne to give us exactly the spectrum that we want. If you hold a prism to the light and you have white light, you can separate that into red, orange, yellow, green, blue, indigo, violet. You can recombine those with three basic colors to get white, but you have gaps in it. If you look at that with a spectroscope, if you look at a fluorescent lamp, you'll find it's not a continuous spectrum.

So we developed a system. We broke the price barrier, most of the units on the market, sold for \$5,000 up. This Brain Tuner has everything that was necessary for the brain to rehabilitate it's own production of neuro-transmitters. In the meantime we had found about 200 pounds of literature—at least I have that many boxes full of Xerox material that friends had sent me—literally cardboard cartons full. My filing system is abysmal. I'm very creative—I just pile it in boxes and hope I can find it later. ... The stress-related symptoms that are recognized are: insomnia, addiction, anxiety and depression. ...

So naturally there was a great deal of resistance to this type of technology. So right now there's this political hassle happening over the fact that even the Carnegie Report, the study back at the turn of the century, tried to damn all of the electronic medicine that had been proven back in the 1890's to be highly effective. And you know who funded those studies. It's very much like the American Tobacco industry saying that the link between lung cancer and smoking—there isn't any. So we could go on and on about this. Basically that's what the device is. That's how I started to do it. I hated to see people being charged \$1,000 a day and the thing just grew and grew and grew.

### TENS Devices and the Politics of Health

Apparently a number of TENS (Transcutaneous Electro Nerve Stimulation) devices like the AccuStim and AccuScope are being used in sports medicine. But they are basically being used to relieve pain. TENS units have been around for about 100 years. When Norm Shealey saw the little device from the barber shop that had an induction coil and a flashlight battery and a handle that you roll up and down your back, he had thought this was a good idea and brought out one of the first transistorized TENS units. By the way, there's an interesting story. The Stemtech Company was purchased by Johnson & Johnson, I'm sure you're aware of the litigation that came down. And a few years ago, the president of Stemtech, took Johnson & Johnson, which is one of the largest pill manufacturers in the United States, they make Tylenol, Super Tylenol and what have you—hundreds of other products. They took them to court saying, "you've suppressed this technology."

They won. The judge said, "In 30 years on the bench, I have never seen a more flagrant violation of trust" (this was reported in a number of magazine articles.) Johnson & Johnson appealed the 130 million dollar judgement against Johnson & Johnson and lost the appeal. The inventors of the Stemtech which is only one of maybe 20 or 30 TENS units, then got back in motion. The judge pointed out that it wasn't to the advantage of Johnson & Johnson to have anything to relieve pain if they were in the business of selling Tylenol. So that's a matter of public record that the drug companies try to suppress this type of technology. That was a pretty big lawsuit—it made a lot of headlines.

That's typical, you see we're not dealing with a scientific problem with this type of instrumentation, we're dealing with a socio-political-economic problem. The government on one hand subsidizes the tobacco growers and on the other hand says you have to put a warning on the packages. But the tobacco growers generate so much tax revenue that they're in this double bind.

This thing is a political problem not a scientific one. The same thing is happening with the new emerging electronic medical devices. Germany has some of the most amazing things, the Mora Unit—you're familiar with that, the Dermatron. These things do almost psychic diagnostic work. And yet they're totally outlawed in this country. Andreas has to smuggle these things in—call them agricultural testing devices.

Should we charge more money? We've had one complaint from a number of professional users. They say "For God's sake, take that thing and put it in a great, big box, put a lot of dials and bells and whistles and light-emitting diodes

and switches on it, all of which would be dummy incidentally, and charge five or six thousand dollars for it. Then people will have faith in it." And I say "Well that's criminal." But anyway that's my philosophy.

### Early Research Studies

Okay, the results of this on drug addicts were generated in the US several years before Meg learned about the device in Hong Kong. And the vast literature on this was funded by the Neuro Systems Group in Garland Texas. How many of you have heard of the Executive Monkey study. This work was funded by the people who brought this box out originally in 1970. This is before Dr. Wen had his serendipity, his accidental discovery, with the heroin addicts in Hong Kong. I didn't realize you could give monkeys ulcers. But what they had done was to aggravate them enough to where they had ulcers and put the device on their acupuncture points. They found that within about three days they had reversed the pH, the acidity, and the monkeys got better—the control group. All of this work had been thoroughly done long before this current era of re-stimulation of interest. The rat studies had been done both in San Francisco and in Hong Kong. The chromatography had been done here in the United States, so it was well controlled.

Like electronic medicine, when we were looking at patents, we found a patent in 1893 showing a fellow with electrodes behind his ears. Okay, 1893, before the Harrison Act, some 20 some years before the Harrison Act you could go into any drugstore and buy morphine sulfate. Mothers whose babies cried could buy simple soothing syrup, which was sugar and morphine. She'd give a teaspoon to the baby and the baby wouldn't cry anymore. There were quite a few addicts. The stuff was legal, there was no control. I mean marijuana was legal. After the Act, a number of people who were trying to get off this had forgotten that around 1890 we had a hell of a lot more addicts in this country. The women who were religious were sipping tonic which was about 200 proof alcohol for their health, taking bitters and what-have-you. In other words, we had about the same addiction level. And this work had been explored about 84 to 85 years ago and then again suppressed by what we feel is the ruling class of the doctors, the pharmacies and the people who want to take your money for making you better. ... Fisher, no relation to Jerry, had done this work in 1932 and 1935 and had a number of patents. Remember the Fisher Instrument Company that was making electrical stimulating devices back 40 years or so. Okay, this has been in the literature, they had explored in great depth the wave forms, the frequencies, the application modes and what-have-you.

### **Bob Beck's Early Research**

There's a replica of the work I did in 1973. In 1969 I began building ethical biofeedback equipment—EEG Brainwave Amplifiers. I had one foot on each banana peel, I had been a scientist and I am now a kook, so we sort of straddle this chasm. So I have taught biofeedback classes at UCLA, USC, Vilanova University of Hawaii, SMU. And when I was doing this for health professionals, I also had access to the psychic underground. In Hawaii I was able to make brainwave recordings of one of the three living bloodline Polynesian Kahunas. I was able to make brainwave EEG recordings of hexinmeisters like John Ott in Lancaster County-no relation to the fellow who did the work on light and color. I have worked with American Indian medicine men. I've worked with Kathryn Coleman before she died. And she let me run a little telemetry test when she was knocking them down at the Shrine Auditorium. We found almost invariably that when they were in their working state—which was only a few seconds—you're here you get the information you come back, you can talk about it for hours. It's a flash, in the twinkling of an eye. They were showing about a 7.83 hertz, almost pure coherent maybe 20 microvolt signal frontal to occipital midline. That's between F1 and F2 in the standard nomenclature system to halfway between 01 and 02 if you're an encephalographer. In other words the third eve ... which shows whole brain alpha. Over and over again we found these frequencies in people with remarkable talents-healers, radionics operators, dousers, shamans, witch doctors, mystics, golden don, priests and priestesses—if they were authentic. One of our early cases was, well I'd better not mention the person's name, and it's a world famous name.

But at any rate I was intrigued enough to want to discover the common denominator, yet none of these persons would speak to the others. Kathryn Coleman thought it was the blood of the lamb that Christ had died for your sins and that's the only way to go and some of the American Indian medicine men thought it was in the sacred cornmeal, the gourds and the feathers. Marnis and Leona had certain stones that were the dwelling place of the ancestral spirits.

Well, Kathryn would think that was heathen and Marnis would absolutely laugh at a fellow in a barn in Lancaster County wearing a black hat between midnight and dawn drawing these hexan signals to bless the barns. So after we'd seen it enough times, I developed very sensitive magnetometers, which I sell to the government for anti-submarine warfare, that would detect this earth ionosphere cavity resonance. And in a few cases—not enough to make a solid scientific case, but enough to be extremely interesting anecdotally—we found that there was phase-lock ... frequency, amplitude, etc. between that person's EEG signature and the earth's brainwave itself. Now this was heresy, when I reported on it in 1973 and then did a more formal paper in 1977.

We'd rather you learn to enter altered states through EEG biofeedback instead of having it done to you. I teach classes back east occasionally, where they have a number of people who get into this state very rapidly.

### <u>The Mind as a Hologram</u>

What does this mean? It means that some people with remarkable talents, maybe one in one thousand, are sensitive enough to tune to this cosmic clock. When they synchronize their brainwave with this signal, they can access information in the hologram, which is normally not accessible except in an altered state of consciousness. If we take a hologram with helium-neon laser light which happens to be 632.8 nanometers and try to play that hologram back with a carbon dioxide laser or anything else, we've got garbage. That hologram, at least in the old fashioned system not the dichromates, must be played back at that specific wavelength of light. If it doesn't you garble the image. The holographic mind, which was very hot several years ago as a topic of conversation ... David Bohm, of course this is his theory, and Karl Pribram thought it was a good idea and got on board.

It is now fairly certain that the mind is a hologram, it acts holographically. If you cut a picture in half and throw half of it away, you've lost half the data. But if you cut half of your brain out, like we had a number of hydroencephalites that had a brain about the size of a grape and we had veterans coming back from Korea, Vietnam, World War 1 and 2, that had 90% of their brain missing. They hadn't forgotten 90% of their family—they had remembered every single person. It wasn't as though you had thrown half of the information away. So, that suggested that the brain was processing information like a hologram. If you break that hologram into smaller and smaller pieces, you still have the whole picture but in less detail. But you can't see that picture unless you have that specific excitation frequency of, in the case of helium-neon, which is the most common, replays that information. So as a metaphor only, if the person has by dent of meditation, religious practice, taking sacred mushrooms or whatever, the person does manage to hit that frequency in his brainwave pattern, it seems to make him more amenable to all of this information.

Now this is interesting because if our brain, our mind, is a hologram and if you and you are existing here right now, you're a part of it. Which means that if you can access what is in your mind, quantum physics says there's no reason why you can't access the whole thing. Thou art that. You are in the universe, the universe is in you. You are God. Whatever information is out there you have just a little bitty slice of it, it isn't as sharp, it isn't as high resolution as if you were everybody at the same time but you can do it. Any shaman or person who's undergone any kind of mystical discipline ... can demonstrate this. ... So what that means to us is that maybe that magic number 7.83 Hertz is the place on the alpha-theta border. Alpha is from 8 to about, they used to say 14, we now say 12½ because there's a kappa in the gap. Theta is usually considered to be 4 to 7. So 8 or 7.83 is right there on the bi-phasic border between the alpha-theta. We've known for years that theta might be the area where we access creativity. You recall that Thomas Edison, Bernard Berude, many people, would take a little catnap when they were dealing with a particular knotty problem. They would say, "I will have the answer when I wake up" and usually they would. The reason for that didn't emerge until many, many years after the death of these people who had been using this technique.

A number of us use this technique today. It was demonstrated that when you go to sleep, the hypnogogic state going from waking to sleeping, the hypnopompic coming up from sleep to normal consciousness, you pass through that alpha-theta border and that might be the place where you access the information external to your own nervous system. Now, you can get an argument on this, but great ideas down through history from the invention of calculus to inventions of many other things have appeared simultaneously at places all over the planet. So that means that maybe Rupert Sheldrake is right—that there is a morphogenetic field and that maybe this is the best way to access this.

Now getting back to, "What does this mean?" this state can be stimulated with small magnetic oscillators. I brought this one that was brought in from Germany. This is the Vittaset unit that many of the important people in Germany have to wear because it re-synchronizes the left and right hemisphere firing with this little magnetic pace setter when they're feeling particularly distressed because they're closer to the Eastern Iron Curtain transmitters than we are. This work has also been done by Delgado who had to leave the University of New Mexico and go to Spain because his work was so controversial. It's been done by Ross Adey at his VA hospital out here in Loma Linda. It has been replicated by any number of people both in the open literature and in the intelligence community as a fact. Your brain can be stimulated to go into these particular states ... so, instead of it being witchcraft, this is emerging as the medicine, the consciousness of the future. Instead of dropping acid to alter consciousness, there are far more benign ways.

Well, I would say that science and religion are on a collision course if they haven't collided a long time ago. I would say that we now have scientific proof that man, as a bio-cosmic resonator is tremendously sensitive to these very small stimuli. There are three to five hundred papers on this topic in the hard-core scientific literature. Now if you choose to challenge me on that figure I will take you 10 to 1 in a bet. It's an explosion of information! Years ago we were a piece of meat. Today, we are a finely-tuned instrument that can access information exterior to ourselves and do something with it—bring it back. I'm told about a time when Bob Monroe gave a demonstration for the CIA and he was challenged to leave his body. This happened in Maryland if I got the story straight from the naval office of surface weaponry that sponsored it. That's the skunk works back there in White Oaks, Maryland. Bob actually went to the distant site, got into the safe, read the data and came back. It was later verified on a double blind test. Half the people in that room got up and said, "Gee that's interesting. I wonder how he did it. It has to be some kind of a trick." And then went unconscious about it later. Their reality structure could not admit that, damn it, the Soviets have been doing this for a long time and there are some people over here that are on top of it. It's the challenge to your belief structure that stops, well we could go on forever. One of the implications of this is that we have new technology for enhancing consciousness rapidly, safely, right now, with no side effects ... that is by no means perfected. But at any rate this has been researched for about 20 years and it works.

### Use of the Brain Tuner

### **<u>Placement of the Electrodes</u>**

The electrodes go behind the ears. You might want to know how this happened. Traditionally the point for stimulation for electro-acupuncture for certain types of surgery is .86, which is in the ear, the area that's called the heart lung point in classical acupuncture. Dr. Wen was inserting number 30 needles, I think it was 3 tenths of a millimeter beneath the surface of the skin at a 30 degree angle. And he was putting—this is all in the open literature—alligator clips to these needles. Meg Patterson found a spot on the mastoid process right up here at the top of the ear, using external electrodes, not penetrating the skin, no blood and guts, that was just as effective. The neuro-systems people, in doing a study, found that by far the most effective spot is this little hollow behind the TMG, the temporal mendibular joint. This accesses various acupuncture points on what's called the triple warmer.

How accurately does it need to be placed? With electro-acupuncture, anywhere between a half and three quarters of an inch will still hit it because the current is diffused. The electrons being of light charge will disperse through the body, so anywhere near that is effective.

[Editor's Note: The headset Bob Beck used for the Brain Tuner has been replaced with ear clips on similiar units. The ear lobes are a rich source of acupuncture points connecting to the brain.]

### <u>How it Should Feel</u>

Well, you may notice a sting if you don't clean. There's the oil, I took a bath before I came here but I feel a little oil on my skin. It's a matter of contact and if you clean that area with a little swab of alcohol and get good contact, there is no sting. It's a very pleasant sort of buzzing stimulation.

You may feel more on one side than the other. Most people will feel a difference in stimulus on one side or the other and to prove that it's you and not the instrument, simply turn your head all the way one way and all the way the other and you'll find that the focus will shift. What you're getting there is the difference of the bio-electric muscle tension—plus or minus the AC coming in on the electrodes.

What amplitude is necessary? You turn it up to the point where it's basically uncomfortable, then turn it down to where it's comfortable. In about 10 minutes you'll find that you'll acclimate and you'll have to turn it higher and higher. Your body builds up a tolerance to it.

### Length of a Session

Is there any threshold on having your neuro-transmitters stimulated? The dosage, all of the plateaus have been noticed by most of the workers at between 20 and 30 minutes. 40 minutes is red line. If you go 45 minutes, they begin coming down the other side of the slope. It won't do any damage, but you will undo the benefits. So, we recommend that the device be used for only about 20 to 30 minutes a day. Too much medicine is worse than not enough. So, in the case of an alcoholic that's into DT's, bed-ridden, throwing up, you know really in bad shape—we say two sessions, 40 minutes in the morning and 40 minutes at night, a day. When the person is more or less back together we say then cut that back down to 40 minutes once a day. That seems to be enough.

### <u>Side-Effects</u>

What about side effects? The most troublesome side effect that has been noted almost universally is that it stimulates lucid dreaming. Some people who have been shut off from their dreams are a little alarmed, at first.

Is it possible to replace an addiction with an addiction to the Brain Tuner? No. We've had a problem with a few alcoholics who we've gotten off say a fifth of scotch a day. And they feel so great they panicked. When they went back, drinking only two fifths they got the same effect that they would on one. We believe that this is the death wish and since God gave those people free will and they've chosen to anesthetize themselves, that's their choice. But if they want to kick whatever it is, it works. It only works about 45% effectively with tobacco. With Dr. Elizabeth Long's work with heroin, morphine, it's been about 95%. With Valium and Librium about 95%. The only thing that we can't kick almost instantly is tobacco. That's the most addictive substance known to man.

### Other Benefits-Memory, Depression, Anxiety, Insomnia

What are the benefits if you don't have an addiction? This is another one of the startling side-effects. My own lady had had a spinal block when her daughter who is 25 years old was born. Since that time she could not remember telephone numbers or addresses very well. She found after she'd been on it one day that she was recalling telephone numbers, did not need the telephone book, ... and numbers that she had known 20 years earlier when she worked in aerospace, were coming back. You'll find that you can recall faces and places that you thought you had lost, they're just there. It does amazing things to the memory. It is as specific for stress reduction. If you have any type of anxiety, depression, insomnia. If it's chronic it takes about 3 weeks. This is a universal constant that has been replicated in any number of studies. If it's acute it takes about a week.

Does it improve intelligence? What they found in a student study at the University of Louisiana, again this is accessible in the literature, they were working on students who had anxiety about final exams—and I know I've been there, years ago fortunately. And after they had removed the anxiety, the freezing, their IQ's went up. So the story was spread around for a while that these things improved intelligence. But it turned out that that isn't what was happening. What had happened is that they had restored these person's memory. Apparently they were then able to access the information in a shorter period of time and since IQ tests are graded against a clock, they were getting higher scores. So it wasn't intelligence, it was simply memory that had been rehabilitated. And this was controversial from about 1972 to 74. There were all these arguments in the literature about why was this person performing better and the final solution was simply that the memory had been restored. In other words apparently when the brain is tuned, the neuro-transmitters are in balance.

With regards to depression, lithium carbonate requires blood assays, the dosage is fairly critical. In most of the studies, again double blind, a most amazing thing happened in some of these studies. The doctors, who had done them, and I have one or two of these from the University of Wisconsin, said that we hope our colleagues check our results. We can't imagine anything being this effective and yet we've gone over our studies repeatedly. To have a responsible scientist put that in his report as sort of a disclaimer, I found rather titillating. And yes, it does specifically address stress-related symptoms and at the top of that list are anxiety and depression. And we don't know of anyone who doesn't have a taste of these no matter how well balanced, how well adjusted, how high on pot, or low on Valium, Librium or what have you that they get to be.

When the Brain Tuner is used, does that place someone in a beta state or alpha state or something like that? Not necessarily. It simply addresses the stress-related symptoms of depression, anxiety, insomnia or addiction, hypertension, you name it. ... When you relieve the stress, you're going to reverse that condition. There was a time when they thought that maybe there was one or two diseases that had no stress related syndromes, like cancer. Now, of course, it's been shown that there are vast psychosomatic factors in even that. So the point is you can hardly name any existing condition that is not stress-related. The body has a marvelous ability to heal itself if it has the proper things to work with. And if you relink that body with some of it's normalized neuro-transmitters, they apparently work faster than anything else to normalize the body.

### <u>Learning Disorders</u>

Dr. Hunt has been working with people with dyslexia and she finds that she can resynchronize their left and right hemisphere. This is measured with photo-stimulus. If you flash a strobe light at the closed eyes of a child with dyslexia and measure the evoked potential, the photo-stimulus, that's taken off of the occipital, you'll find that the signal will arrive from one eye at a different time than it will the other. You can see this on an oscilloscope. Which means that the optic nerve is not processing that data coherently. After the Brain Tuner is used, the firing of the neurons are reset, so that they're all marching to the sound of the same drummer—the person can read for a while after that exposure without palming, without going through the usual strategies of a person who is unsynchronized. So, you can call it a brain wave synchronizer, you can call it a gobbledy gook. If it's working don't fix it.

### <u>Pain Relief</u>

The Brain Tuner can be used for pain relief. It's a superb TENS or Transcutaneous Electric Nerve Stimulator. I was going to lunch with Paul at the Ambassador a couple of weeks ago and I tripped over (it was very embarrassing) one of these tire puncturing things and having had about 10 years of judo, I slapped as I was going on to the cement. And I broke, I don't know whether I broke the bone—but this was extremely painful. I couldn't even move it. And I thought "Holy cow what's the matter with me?" So I got the Brain Tuner, put it on the area and the next day I had full mobility and no pain. I held the electrodes on my hand for about 10 minutes. So, it's a superb TENS unit. But we don't sell it for that purpose. Meg Patterson, when I first met her, was wearing her brain tuner, the Pharmacon unit in her belt with the electrodes taped on her back. She had low back pain. But you cannot use a TENS unit for a Brain Tuner because there's a DC offset. Any DC above the neck causes small synoptic polarization. Like electrolysis. Do not use a TENS unit as a Brain Tuner but you can use a Brain Tuner as a TENS unit. All hens are chickens, not all chickens are hens.

### Why Bob Beck did not have his Brain Tuner FDA Approved

If this device is approved by the Food and Drug Administration, it will have to have a little label on it that says it is illegal to use, transport, sell, etc., this device without a medical prescription. It will have to go up in price ... the public won't be able to access it, they will have to go to a medical doctor and get a prescription for it. TENS units ... sell for about \$500 to \$600. But the doctors say that unless it costs about \$500 it isn't medicine. It will be another rip off. If it is approved by the Food and Drug Administration, it will not be accessible by the people who want it—except at a very high price.

[Editor's Note: The Bob Beck Brain Tuner is also known as the Bio Tuner.]

# **Success Stories with The Brain Tuner**

Testimonials are reprinted with permission of Bob Beck Legacy Association, www.bobbeck.com

Thanks to each of you for sharing how The Brain Tuner is helping you overcome health challenges. Governments believe the use of testimonials are misleading and deceptive. We trust you understand that what works for one person is not necessarily the answer for another. These testimonials are not to be construed as medical advice. Copies of all testimonials are on file. www.bobbeck.com. To share your experience, please contact info@bobbeck.com.

#### **Sharpens Memory**

From time to time he has problems, you know, like forgetting things. And I tell him, Dad ... you need to do the Brain Tuner, and honestly, he'll do the Brain Tuner and it's sharpened him up. ... In the past since he's had his surgery, with all of the medications and everything, it really affected his memory. But we just get that little Brain Tuner out and he does a few days of that and I can tell the difference, actually, after one treatment.

L.B.A., Idaho, USA

### **Dramatic Life Change for Teen**

I am an 18-year-old student living in Switzerland. Last year I was having some real problems with low selfesteem, excessive drinking, smoking both cigarettes and pot and paying little attention to my studies. Partying with my friends became my sole interest. I had also become rude and unmanageable, lashing out at the people I care about most. ... I used the Bio Tuner religiously every day for 40 minutes. ... Within the first week, I noticed a difference in my ability to attend to my studies and my memory improved. It also made me feel better about myself and this in turn made me happier and friendlier. ... I used the Bio Tuner every day for a month and then took a break and now use it when I feel I need to. I continue to do very well and enjoy my family.

A.N., Switzerland

### Able to Stop Drinking

I was drinking on a weekly basis at the age of 16. I believe I was an alcoholic by age 18. At age 36, I began using the Bio Tuner for 2 sessions of 20 minutes each day. After 4 days, I did not crave a drink anymore! ... I began to enjoy simple everyday activities more—like walking my dog, Chewy. I felt more joy and spirituality. My sleep improved. My girlfriend noticed I was less hyper and anxious. I did not desire to drink anymore and felt personally satisfied and fulfilled. ... I was an alcoholic. Now my cravings to drink are gone ... Time will tell if that is truly the case.

P. V., British Columbia, Canada

### **Relief from Anxiety**

I have suffered from anxiety since I was a young boy. It is hard to find the words to describe how I feel when I have one of these episodes, but I get these awful feelings like I can't breathe. I also see what looks like a mirage of heat waves that one would see when driving on a hot summer day. I feel like I am going to suffocate when an anxiety attack grips me. ...

I researched Dr. Bob Beck and ordered his handbook. I was particularly interested in what he had to say about the Bio Tuner ... I began using the Bio Tuner 40 minutes per day. ... After 20 or 21 days, it dawned on me that I had not had an anxiety episode in all those days. I was ecstatic with this discovery and have not had to use the unit since! It has now been the better part of a year since I completed my first program and I have my life back.

A.B., New York, USA

### **Thinking Clearly Again**

Fifteen years ago I underwent open-heart bypass surgery to have a tumor (myxoma) removed from the right atrium of my heart. The tumor was larger than the atrium and effectively served as a plug in my mitral valve. Prior to the tumor diagnosis, I presented with symptoms resembling Alzheimer's syndrome. A neurologist could only establish that the deeper centers of the brain were not receiving oxygen. She prescribed medication to help dilate blood vessels thus getting more oxygen to those parts and giving some relief. When the tumor was finally diagnosed I needed open heart surgery. As a result of degeneration to brain tissue from lack of oxygen, I was left with poor short-term memory, lack of attention and concentration and inability to remain focused. I also experienced lots of anxiety because of always feeling out of control.

I have to say how delighted I am after my first month of using the Bio Tuner to be given back my brain!!! It is the most wonderful experience to once again be able to feel centered and focused in meetings. ... I am just so very grateful for this recovery of my mental functioning.

N.Z., South Africa

### **Optimistic About Life Again**

In my late twenties I had overworked myself. At that time I didn't know that too much stress can and usually will result in a burn out syndrome, with depression. I was depressed for a year. ... Then I met Bob Beck personally, at a seminar where we both participated. I was introduced to the Brain Tuner and decided to use it once a day for half an hour. After one week I was feeling normal again. A year of living in the gray of depression was lifted and I was back to the living again. This Brain Tuner changed me, overnight.

I.S., Washington, USA

#### **Depression Lifted**

I get depression due to lack of sunlight. My life has been like this for about 20 years. When I don't get enough sunshine, I get lowered immunity, lack of stamina, I want to sleep a lot and I feel discouraged. ... Using the Bio Tuner can turn things around within about 15 minutes. I need to keep up with it for at least 3 times a week for an hour each in the dark times of the year.

S.L., Ontario, Canada

#### **Enjoying a Positive Outlook**

A few years ago I experienced a trauma in my personal life. I lost my apartment, my financial security, friends, family and even my fiancé. Subsequently, I fell into a very deep depression. If I even got out of bed during the day, it was really amazing. ... This went on for a year or so. Then I remembered I had the Bio Tuner. I started using it for about 25 minutes per day. A couple of days later, I could feel a little lifting. Then a couple of more days passed, and I felt a little more lifting. On day 7, I woke up and knew I was back to myself. That was 5 years ago. ... Now, if I start feeling a little depressed, I use the Bio Tuner for a day or two and I feel fine again.

C.K., Illinois, USA

### **Clean and Drug Free**

I want to inform you that after 20 long years of methadone addiction, that the Bio Tuner helped me reduce from 100 mg to 25 mg to 0 mg in a week with NO pain. The Bio Tuner is fantastic ... WOW!

K.S., Germany

### Feeling Calm and Confident

I purchased the Brain Tuner and I can't begin to tell you how happy I am with it. It has literally changed my life. ... I've had chronic anxiety since the age of 7. ... I had never actually known what it felt like to be truly happy or excited about anything. It makes me emotional when I think about it. We're supposed to enjoy life. Anxiety makes you anticipate the worst case scenario in every situation. It's certainly no way to live. ...

I stood and watched my wife walk down the aisle and was not only completely calm and relaxed, I actually enjoyed every moment of our ceremony and reception. I also addressed our guests and delivered my speech with confidence and emotion. It was a feeling I'll savor for the rest of my life.

A.D., Victoria, Australia

### **Amazing Change**

I suffered with severe depression for about eight years or so and tried many things to get better. It was a living nightmare for my wife and I through these years. ... Then my brother told me about the Bio Tuner. I admit I was very skeptical about this technology ... I started applying Mode 1 for 40 minutes per day. After day two I noticed I felt better and by day three, I definitely knew I was feeling better. I hesitated to say anything to my wife about how I was feeling as I wanted to make sure it was going to continue this way for me ... my wife looked at me and said that she thought I was "changed for the better." To see that she noticed the difference I was feeling was really something for me. ... I feel really positive after three weeks of use now and am definitely no longer suicidal.

J.T, California, USA

### **Muscle and Joint Pain Gone**

I had been having some muscle pain for about a year and a half in my right arm. I work as a seamstress and concluded that perhaps I had some repetitive stress syndrome. ... I used the Brain Tuner once a day on my shoulder. ... For two months I used the Brain Tuner everyday, once a day, with regularity and consistency. ... It has now been 6 months since I first started using the unit for this joint problem. I can happily say that I no longer have any pain whatsoever. Complete movement has returned to me!

K.M, California, USA

### Book References Specific To The Beck Brain Tuner And Bob Beck's Research On The Brain

Mega Brain Power, Michael Hutchison, 1994.
Super-Learning 2000, Sheila Ostrander & Lynn Schroeder, 1994.
Energy Medicine, The Scientific Basis, by James L. Oschman, 2000.

### **Spectrum The Wholistic News Magazine**

January/February 1995, Magazine Excerpt

### SHOCKING TREATMENT FOR TROUBLED MINDS

Cranial Electrotherapy Stimulation (CES) has been proved to be an effective, non pharmacological, non toxic therapy for anxiety, depression and insomnia. It works by delivering a soothing, low voltage electrical stimulation to the brain 45 minutes a day via a Sony Walkman type headset resting on both ears. Patients can use CES at home while engaging in other activities, except, of course, for driving or other possibly dangerous activities. Side effects are negligible—users might experience an occasional transitory feeling of light headedness or a mild headache if the unit is turned up too high.

Several scientific studies support the effectiveness and safety of CES. In six separate placebo controlled studies of anxiety, 220 hospitalized psychiatric inpatients receiving the treatment for at least 30 minutes per day for three weeks showed a significant lessening of anxiety; compared to controls. Similar studies with depressed patients revealed an average reduction in depression scores of 50%.

CES is thought to act by correcting neurotransmitter imbalances. Scientists discovered that severely depressed patients receiving CES had increased serotonin and norepinephrine blood levels, and normalized serotonin/ betaendorphin and norepinephrine/cholinesterase ratios. Because CES duplicates the biochemical changes of drugs like antidepressants, it usually takes one to four weeks for the therapeutic effect to take hold.

Potential applications for CES treatment include addictions, phobias, panic disorder, attention deficit disorder, and cognitive dysfunction. It has also been found quite effective for tension headaches.

> (Based on facts presented in: Bridges ISSSEEM Newsmagazine, Winter 1993)

### **For more information** on the Beck Protocol, the Brain Tuner, Bob Beck and a database of testimonials:

### www.bobbeck.com

### www.naturalhealthproductions.com

## Beck's Bibliography Of Cranial Electrical Stimulation Research, 1983

This bibliography is not specific to the Beck Brain Tuner. The research is specific to Cranial Electrical Stimulation—the technology on which the Brain Tuner is based.

- 1. Achte, K.A., Kauko, K. and Seppala, K., On "electrosleep" therapy, *The Psychiatric Quarterly*, Vol. 42, p. 17-27, 1968.
- 2. Astrup, C., A follow up study of electrosleep, *Biological Psychiatry*, Vol. 8, p. 115-117, 1974.
- 3. Barabasz, Arreed F., E.D.D., Treatment of insomnia in depressed patients by hypnosis and cerebral electrotherapy, *The American Journal of Clinical Hypnosis*, Vol. 19, p. 120-122, 1976.
- 4. Brand, J., Electrosleep therapy for migraine and headache, *Electrotherapeutic Sleep and Electroanesthesia* Vol. 11, Proceedings of the second international symposium, Graz, Austria, 1969. Editor, F.M.Wageneder, Exoerpta Medica, Amsterdam, 1970. p. 1-13,115.
- Braverman, E., Smith, R., Smayda, R. and Blum, K., Modification of P300 amplitude and other electrophysiological parameters of drug abuse by cranial electrical stimulation, *Current Therapeutic Research*, Vol. 48, p. 586-596, Oct. 1990.
- Briones, David F., M.D. and Rosenthal, Saul H., M.D. Changes in urinary free catecholamines and 17 ketosteroids; with cerebral electrotherapy (electrosleep), *Diseases of the Nervous System*, Vol. 34, p. 57-58, Jan. 1973.
- 7. Brown, C., Electroanesthesia and electrosleep, American Psychologist, Vol. 30, p. 402-410, Mar. 1975.
- 8. Cartwright, R. D., Ph.D. and Weiss, M. F., M.A., The effects of electrosleep on insomnia revisited, *The Journal of Nervous and Mental Disease*, Vol. 161, p. 134-137, 1975.
- 9. Childs, Allen, M.D., New treatments offer hope for agitated brain syndrome, *The Psychiatric Times*, Sept. 1988.
- 10. Childs, Allen, M.D., The use of cranial electrotherapy stimulation in post traumatic amnesia: a report of two cases, *Brain Injury*, Vol. 2, p. 243-247,1988.
- 11. Correspondence: Polarization in depression, The British Journal of Psychiatry, Vol. 117, p. 474, Oct. 1970.
- 12. Correspondence: Polarization therapy in depressive illnesses, *The British Journal of Psychiatry*, Vol. III, p. 447–448, May 1965.
- 13. Costain, R., Redfearn, J.W.T. and Lippold, O.C.J., A controlled trial of the therapeutic effects of polarization of the brain in depressive illness, *The British Journal of Psychiatry*, Vol. 110, p. 786-799, Nov. 1964.
- 14. Coursey, R.D., Frankel, B.L., Gaarder, K.R. and Mott, D.E., A comparison of relaxation techniques with electrosleep therapy for chronic sleep onset insomnia, *Biofeedback and Self Regulation*, Vol. 5, p. 57-71, Mar.1980.
- 15. Coursey, R.D., Frankel, B. and Gaarder, K., EMG biofeedback and autogenic training as relaxation techniques for chronic sleep onset insomnia, *Biofeedback and Self Regulation*, Vol. 1, p. 353-354, Sept. 1976.
- 16. Cox, Arls W., M.D. and Heath, R. G., M.D., Neurotone Therapy: a preliminary report of its effect on electrical activity of forebrain structures, *Diseases of the Nervous System*, Vol. 36, p. 245-247, May 1975.
- 17. Dymond, A.M., Coger, R.W. and Serafetinides, E.A., Intracerebral current levels in man during electrosleep therapy, *Biological Psychiatry*, Vol. 10, p. 101-104, 1975.
- 18. Empson, J.A.C., Does electrosleep induce natural sleep?, *Electroencephalography and Clinical Neurophysiology*, Vol. 35, p. 663-664, Dec.1973.
- 19. England, R.R., Treatment of migraine headache utilizing cerebral electrostimulation, *Masters Thesis*, North Texas State University, Denton, Texas, Dec. 1976.
- 20. Feighner, J.P., M.D., Brown, S.L., M.D. and Olivier, J.E., Electrosleep therapy: a controlled double blind study, *The Journal of Nervous and Mental Disease*, Vol. 157, p. 1, 21, 128, Aug. 1973.
- 21. Flemenbaum, A., M.D., M.S., Cerebral electrotherapy (Electrosleep): an open clinical study with a six month follow-up, *Psychosomatics*, Vol. 15, p. 20-24, 1974.
- 22. Flemenbaum, A., M.D., Cerebral electrotherapy (electrosleep): a review, *Current Psychiatric Therapies*, Vol. 15, p. 195-202, 1975.

- 23. Forster, S., M.D., Post, B.S., M.D. and Benton, J.G., M.D., Preliminary observations on electrosleep, *Archives of Physical Medicine and Rehabilitation*, Vol. 44, p. 481-488, Sept. 1963.
- Forster, S., Shapiro, A., Fine, L., Feldman, H.H., Berner, H. and Goldberg, M., Continued investigations of electrosleep, *Electrotherapeutic Sleep and Electroanesthesia*, Proceedings of the first international symposium, Graz, Austria, Editor, F.M. Wageneder, p. 169-171, Sept. 12-17, 1966.
- 25. Frankel, B.L., M.D., Research on cerebral electrotherapy (electrosleep): some suggestions, *The American Journal of Psychiatry*, Vol. 131, p. 95-98, Jan. 1974.
- 26. Frankel, B.L., M.D., Ineffectiveness of electrosleep in chronic primary insomnia, *Archives of General Psychiatry*, Vol. 29, p. 563-568, Oct. 1973.
- 27. Frankel, B.L., Buchbinder, R. and Snyder, F., The effect of cerebral electrotherapy on the sleep of chronic insomniacs, *Electrotherapeutic Sleep and Electroanesthesia*, Vol. III, Third international symposium, Varna, Editor, F.M. Wageneder, p. 123-127.
- 28. Gershman, L. and Clouser, R.A., Treating insomnia with relaxation and desensitization in a group setting by an automated approach, *Journal of Behavior Therapy and Experimental Psychiatry*, Vol. 5, p. 31-35, Jul. 1974.
- 29. Gibson, T.H., Ph.D. and O'Hair, D.E., Ph.D., Cranial application of low-level transcranial electrotherapy vs. relaxation instructions in anxious patients, *American Journal of Electromedicine*, First Quarter, p. 18-21, 1987.
- 30. Glazer, I., Ashkenazi, A. and Magora, F., Electrosleep therapy in bronchial asthma, *International Archives of Allergy and Applied Immunology*, Vol. 36, p. 163-171, 1969.
- 31. Gomez, E. and Mikhail, A.R., Treatment of methadone withdrawal with cerebral electro therapy (electrosleep), *The British Journal of Psychiatry*, Vol. 134, p. 1-11, 112, 1979.
- 32. Hearst, E.D., M.D., Cloninger, C.R., M.D., Crews, E.L., M.D. and Cadoret, R.J., M.D., Electrosleep therapy, a double blind trial, *Archives of General Psychiatry*, Vol. 30, p. 463-466, 1974.
- Itil, T., Gannon, P., Akpinar, S. and Hsu, W., Quantitative EEG analysis of electrosleep using frequency analyzer and digital computer methods, *Electroencephalography and Clinical Neurophysiology*, Vol. 31, p. 294, Sept. 1971.
- 34. Jarzembskl, W.B., Electrical stimulation and substance abuse treatment, *Neurobehavioral Toxicology and Teratology*, Vol. 7, p. 119-123, Mar/Apr. 1985.
- 35. Kelley, J.W., M.D., Kelley, I.H. and Kalman, C., Cerebral electrical stimulation with thermal biomedical feedback. *The Nebraska Medical Journal*, p. 322-326, Sept. 1977.
- 36. Koegler, R.R., M.D., Hicks, S.M., M.D. and Barger, J.H., M.D., Medical and psychiatric use of electrosleep (transcerebral electrotherapy), *Diseases of the Nervous System*, Vol. 32, p. 100-104, Feb. 1971.
- 37. Koegler, R.R., Predicting the results of electrosleep therapy. *Electrotherapeutic Sleep and Electroanesthesia*, Vol. III, Third international symposium, Varna, Editor, F. M. Wageneder, p. 123-127.
- Kotter, G.S., Henschel, E.O., M.D., Hogan, W.J., M.D. and Kalbfleisch, J.H., M.D., Inhibition of gastric acid secretion in man by the transcranial application of low intensity pulsed current, *Gastroenterology*, Vol. 69, p. 359-363, Aug. 1975.
- 39. Levitt, E.A., James, N. Mcl. and Flavell, P., A clinical trial of electrosleep therapy with a psychiatric inpatient sample, *Australian and New Zealand Journal of Psychiatry*, Vol. 9, p. 287-290, Dec. 1975.
- 40. Lewis, J.A., M.D., *Electrosleep Sleep Therapy*, chapter 3, p. 26-39, Williams, R.L. and Webb, W.B., Eds., Charles C. Thomas Publ., Springfield, Ill., 1966.
- 41. Madden, R.E., Ph.D. and Kirsch, D.L., Ph.D., Low intensity transcranial electrostimulation improves human learning of a psychomotor task, *American Journal of Electromedicine*, p. 41-45, Second Quarter 1987.
- Magora, F., Beller, A., Assael, M.I. and Ashkenazi, A., Some aspects of electrical sleep and its therapeutic values, *Electrotherapeutic Sleep and Electroanesthesia*, Proceedings of the first international symposium, Graz, Austria, Editor, F.M. Wageneder, p. 129-135, Sept. 12-17, 1966.
- 43. Magora, F., Beller, A., Aladjemoff, L., Magora, A. and Tannenbaum, J., Observations on electrically induced sleep in man, *British Journal of Anaesthesia*, Vol. 37, p. 480-491, Jul. 1965.
- 44. Marshall, A.G. and Izard, C.E., Cerebral electrotherapeutic treatment of depressions, Journal of Consulting

and Clinical Psychology, Vol. 42, p. 93-97, Feb. 1974.

- McKenzie, R.E., Ph.D., Rosenthat, S.H., M.D. and Driessner, J.S., Some psychophysiologic effects of transcranial stimulation (electrosleep), *The Nervous System and Electric Currents*, Wulfsohn, NI and Sances, A., Eds., Plenum Press, New York, p. 163-167, 1976.
- McKenzie, R.E., Costello, R.M. and Buck D.C., Electrosleep (electrical transcranial stimulation) in the treatment of anxiety, depression and sleep disturbance in chronic alcoholics, *Journal of Altered States of Consciousness*, Vol. 2, p. 185-195, 1975/76.
- 47. Miller, E.C., M.D. and Mathas, J.L., M.S., The use and effectiveness of electrosleep in the treatment of some common psychiatric problems, *The American Journal of Psychiatry*, Vol. 122, p. 460-462, Oct. 1965.
- 48. Montgomery, I., Perkin, G. and Wise, D., A review of behavioral treatments for insomnia, *Journal of Behavior Therapy and Experimental Psychiatry*, Vol. 6, p. 93-99, Aug. 1975.
- 49. Moore, J.A., Mellor, C.S., Standage, K.F. and Strong, H., A double blind study of electrosleep for anxiety and insomnia, *Biological Psychiatry*, Vol. 10, p. 59-63, Feb. 1975.
- 50. Nias, D.K.B. and Shapiro, M.B., The effects of small electrical currents upon depressive symptoms, *The British Journal of Psychiatry*, Vol. 125, p. 414-415, Oct. 1974.
- 51. Nias, D.K.B., Therapeutic effects of low level direct electrical currents, *Psychological Bulletin*, Vol. 83, p. 766-773, Sept. 1976.
- 52. Obrosow, A.N., Electrosleep therapy, *Therapeutic Electricity and Ultraviolet Radiation*, second edition, chapter 5, p. 179-187, 1967.
- Passini, F.G., Ph.D., Watson, C.G., Ph.D. and Herder, J., B.S., The effects of cerebral electric therapy (electrosleep) on anxiety, depression, and hostility in psychiatric patients, *The Journal of Nervous and Mental Disease*, Vol. 163, p. 263-266, 1976.
- 54. Patterson, M.A., The significance of current frequency in neuro electric therapy (NET) for drug and alcohol addictions, *Electrotherapeutic Sleep and Electroanesthesia*, Vol. 5, Fifth international symposium, Graz, Austria, Editor, F.M.Wageneder, p. 285 -291, 1978.
- 55. Philip P., Demotes, Mainard J., Bourgeols, M. and Vincent, J.D., Efficiency of transcranial electrostimulation on anxiety and insomnia symptoms during a washout period in depressed patients: a double blind study, *Biological Psychiatry*, Vol. 29, p. 451-456, Mar. 1991.
- 56. Pleitez, J.A., M.D., New frontier: Electrosleep therapy, The Nebraska Medical Journal, p. 9-11, Jan. 1973.
- 57. Ramsay, J.C., M.D. and Schlagenhauf, G., M.D., Treatment of depression with low voltage direct current, *Southern Medical Journal*, Vol. 59, p. 932-934, Aug. 1966.
- 58. Rosenthal, S.H., M.D. and Wulfsohn, N.L., M.D., Electrosleep: A clinical trial, *The American Journal of Psychiatry*, Vol. 127, p. 175-176, Oct.1970.
- 59. Rosenthal, S.H., M.D. and Wulfsohn, N.L., M.D., Electrosleep: A preliminary communication, *The Journal of Nervous and Mental Disease*, Vol. 151, p. 146-151, Aug.1970.
- 60. Rosenthal, S.H., M.D. and Wulfsohn, N.L., M.D., Studies of electrosleep with active and simulated treatment, *Biological Psychiatry*, Vol. 4, p. 126-130, Mar. 1970.
- 61. Rosenthal, S.H., M.D., A qualitative description of the electrosleep experience, *The Nervous System and Electric Currents*, Vol. 2., Wulfsohn, N.L. and Sances, A., Editors, Plenum Press, New York, p. 153-155, 1971.
- 62. Rosenthal, S.H., M.D., Electrosleep therapy, Current Psychiatric Therapies, Vol. 12, p. 104-107, 1972.
- 63. Rosenthal, S.H., M.D., Electrosleep: a double blind clinical study, *Biological Psychiatry*, Vol. 4, p. 179-185, Apr. 1972.
- 64. Rosenthal, S.H., M.D. and Calvert, L.F., Electrosleep: Personal subjective experiences, *Biological Psychiatry*, Vol. 4, p. 187-190, 1972.
- 65. Rosenthal, S.H., M.D., Alterations in serum thyroxine with cerebral electrotherapy (electrosleep), *Archives of General Psychiatry*, Vol. 28, p. 28-29, Jan. 1973.
- Rosenthal, S.H., M.D. and Briones, D.F., Hormonal studies in cerebral electrotherapy, *Electrotherapeutic Sleep and Electroanesthesia*, Vol. III, Third international symposium, Varna, Editor, F.M. Wageneder, p. 156-157.

- 67. Ryan, J.J. and Souheaver, G.T., Effects of transcerebral electrotherapy (electrosleep) on state anxiety according to suggestibility levels, *Biological Psychiatry*, Vol. 2, p. 233-237, 1976.
- 68. Ryan, J.J., Ph.D. and Souheaver, G.T., M.A., The role of sleep in electrosleep therapy for anxiety, *Diseases of the Nervous System*, Vol. 38, p. 515-517, Mar. 1977.
- Scallet, A., Cloninger, C.R., M.D. and Othmer, E., M.D., The management of chronic hysteria: A review and double blind trial of electrosleep and other relaxation methods, *Diseases of the Nervous System*, Vol. 37, p. 347-353, Apr. 1976.
- 70. Schmitt, R., Ph.D, Capo, T., Frazier, H., M.D. and Boren, D., Cranial electrotherapy stimulation treatment of cognitive brain dysfunction in chemical dependence, *Journal of Clinical Psychiatry*, Vol. 45, p. 60-63, 1984.
- Schmitt, R., Ph.D., Capo, T. and Boyd, E., M.D., Cranial electrotherapy stimulation as a treatment for anxiety in chemically dependent persons, *Alcoholism: Clinical and Experimental Research*, Vol. 10, p. 158-160, Mar./ Apr. 1986.
- 72. Singh, J.M., King, H.A. and Super, W.C., Effects of transcerebral electrotherapy (TCT) in stress related illness, *The Pharmacologist*, Vol. 16, p. 264, 1974.
- 73. Smith, R.B. and O'Neill, L., Electrosleep in the management of alcoholism, *Biological Psychiatry*, Vol. 10, p. 675–679, 1975.
- 74. Smith, R.B., Ph.D. and Day, E., R.N., The effects of cerebral electrotherapy on short-term memory impairment in alcoholic patients, *The International Journal of Addictions*, Vol. 12, p. 575-582, 1977.
- 75. Smith, R.B., Ph.D., Confirming evidence of an effective treatment for brain dysfunction in alcoholic patients, *The Journal of Nervous and Mental Disease*, Vol. 170, p. 275-278, May 1982.
- 76. Smith, R.B., Ph.D., Cranial electrotherapy stimulation, *Neural Stimulation*, Vol. II, Editor, Myklebust, J.B., Ph.D., CRC Press Inc., Boca Raton, Fl., chap. 8, p. 129-150, 1985.
- 77. Smith, R.B., Ph.D., Eighteen month follow up of CES treatment of persons with the Attention Deficit Disorder Syndrome, Unpublished research notes, 1993. (four pages).
- 78. Taaks, H. and Kugler, J., Electrosleep and brain function, *Electroencephalography and Clinical Neurophysiology*, Vol. 24, p. 93, Jan. 1968.
- 79. Templer, D.I., Ph.D., The efficacy of electrosleep therapy, *Canadian Psychiatric Association Journal*, Vol. 20, p. 607–611, Dec. 1975.
- 80. Tomsovic, M., Ph.D. and Edwards, R.V., M.D., Cerebral electrotherapy for tension related symptoms in alcoholics, *Quarterly Journal of Studies on Alcohol*, Vol. 34, p. 1352-1355, Dec. 1973.
- Van Poznak, A., M.D., Advances in electrosleep and electroanesthesia during the past decade, *Clinical Anesthesia: A Decade of Clinical Progress*, Editor, Fabian, L.W., M.D., F.A. Davis Company, Philadelphia, chapter 19, p. 502-520, 1969.
- 82. Von Richthofen, C.L. and Mellor, C.S., M.D., Cerebral electrotherapy: methodological problems in assessing its therapeutic effectiveness, *Psychological Bulletin*, Vol. 86, p. 1264-1271, Nov. 1979.
- 83. Von Richthofen, C.L. and Mellor, C.S., M.D., Electrosleep therapy: a controlled study of its effects in anxiety neurosis, *Canadian Journal of Psychiatry*, Vol. 25, p. 213-218, Apr. 1980.
- 84. Wageneder, F.M., The application of electrosleep in people of advanced age: (insomnia, bronchial asthma. endangilitis obliterans), *American Journal of Proctology*, Vol. 20, p. 351-358, Oct. 1969.
- 85. Weiss, Marc F., M.A., The treatment of insomnia through the use of electrosleep: an EEG study, *The Journal of Nervous and Mental Disease*, Vol. 157, p. 108-120, Aug. 1973.
- 86. Wilson, A.S., Relgel, D., Unger, G.F., Larson, S.J. and Sances, A., Jr., Gastric secretions before and after electrotherapeutic sleep in executive monkeys, *Electrotherapeutic Sleep and Electroanesthesia*, Vol. II, Proceedings of the Second International Symposium, Graz, Austria, Editors, F.M. Wageneder, St.Schuy, Publ. Excerpta Medica, Amsterdam, p. 198-205, Sept. 8-13, 1969, 1970.
- 87. Wilson, L.F., Ph.D. and Childs, A., M.D., Cranial electrotherapy stimulation (CES) for attention to task deficit: a case study, personal communication.
- 88. Woods, L.W., M.D., Tyce, F.A.J., M.D. and Bickford, R.G., Electric sleep producing devices: an evaluation using EEG monitoring, *The American Journal of Psychiatry*, Vol. 122, p. 153-158, Oct. 1965.