Bio energy research

RESEARCH & SCIENTIFIC PROOF

An extensive overview of the research done into all forms of bio-energy and related concepts, through the centuries, reveals a fascinating picture of the scope and diversity of the work done. Scientists, physicists, chemists, biologists, physicians, doctors, psychiatrists and psychologists from many parts of the world have contributed to the research. Many famous names, with impeccable reputations in their fields, appear among the list of researchers. Their solid scientific background help us to appreciate the scientific basis of the Plexus Bio-Energy system of healing.

In Yugoslavia **Zdenko Domancic** was using Bio-Energy in healing very successfully. This phenomenon of bio-energy was scientifically proven there for the first time during research carried out by Domancic with regard to a problem relating to insufficient circulation in the lower extremities of the critically ill patient. **Dr Josip Cicek**, **M**D, a specialist in internal medicine and epidemiology, having witnessed the capabilities of Domincic said:

"According to all medical knowledge as well as that of the doctor, Rudoff Paulisa should have been dead within 48 hours, and yet he is not only alive, but is even recovering. No, this is practically impossible to believe. Had anyone told me, I would not have believed him! Either what I have been taught for decades is wrong or else **Zdenko Domancic** has performed a miracle" (Dr Josip Cicek, M.D.)

Dr Gajdobranski, M.D. spent six weeks observing the treatment of 35 patients. He documented objectively, improvements visible on the skin and limbs, functional improvements, the disappearance of pain as well as other improvements supported by laboratory analysis and technical instrumentation.

Recent scientific studies have focused on the mysteries of morphogenesis; how the actual forms of living things come into being. In the past thirty years, biological science has discovered much about DNA, its structure and how it codes the sequence of amino acids and proteins. But data on DNA does not explain why an organism takes a particular form. DNA is the set of instructions but something else must act on the DNA to unlock and interpret the Code to cause different parts of the genetic form to be expressed as each cell comes into being.

Dr Sheldrake of Cambridge university calls these life patterns "morphogenic fields" – as other scientists do.

Dr Burr of Yale University studied living organisms – people, plants and animals – with a voltmeter to measure electrical potential. He produced careful documentation to verify his statements. He measured the steady-state energy level.

"The pattern of organization of any biological system is established by a complex electro-dynamic field. This field is electrical in the physical sense. It established and maintains a pattern even in the midst of physio-chemical

flux. Therefore it must regulate and control living things. It must be the mechanism, the outcome of whose activity is wholeness, organization and continuity" (Burr).

The medical establishment of the 1930's was not interested in Burr's discoveries. |Other studies by **Dr Ravitz**, a psychiatrist and colleague of Burr's showed a measurable excess of energy in schizophrenics. Dr Ravitz observed that an improvement in the patient'' condition brought about a sustained voltage drop.

Many other contemporary scientists have added to the research, notably Dr **Bjorn Nordenstrom** and **Dr Robert Becker.** Dr Bjorn Nordenstrom, a Specialist in radiology and a pioneer of the needle biopsy, now in common use, spent two decades on meticulous research on the bio-electrical fields of the body. His book "**Biologically Closed Electrical Circuits, Clinical, Experimental and Theoretical Evidence for an Additional Circulatory System**", has been ignored by conventional medicine. His thesis is that the body contains a complex electrical system that regulates the activity of the internal organs and is the foundation of health. He has applied his theories also. He has treated tumors with specially devised electrical probes.

Dr Becker, an Orthopaedic Surgeon, conducted research into the bioelectrical properties of the body – the results of which he published in his book "The Body Electric". Becker's interest in the process of regeneration – not yet explained by modern science – led him to conclude that the secret lies in the unifying bio-electrical properties of the body.

Russian Scientists, **Semyon and Valentina Kirlian**, were the first to develop sophisticated electro-photographic equipment to take pictures of living things radiating a bioluminescence – said to be the radiation of the living energy. They came to realize that these emanations were from a unified biological energy field. Others, such as **Tesla** and **Kilner**, St Thomas Hospital, London worked in the same area. **Dr Thelma Moss, UCLA** demonstrated that relaxation states are characterized by wider and more brilliant emanations, the opposite occurring in states of tension.

The most recent research is by Professor Valerie Hunt of U.C.L.A. in her book "infinite Mind: the first equipment she used to measure this energy was a telemetry instrument. This was built especially for her by the engineer that developed the telemetry systems which NASA used to send back to earth the astronauts' vital physiological recordings of muscle and heart activity during the first manned space trips.

Simply stated, telemetry is a radio broadcasting system capable of intercepting and projecting the body's electrical activity. The electrical signal is picked up from the body's surface, by surface sensors, which lead to a miniature, batter-operated radio transmitter, and amplifier attached to the subject by a belt. The instrument broadcasts the electrical body signal by FM radio frequency carrier. The airborne signal then is picked up in the laboratory by a radio receiver and recorded on tape or disk for future analysis.

She believed the wireless nature of this new instrument would free subjects from the cumbersome wires of ordinary sensory devices, allowing them to act more naturally. Actually it did more than that; it allowed a small, continuous millivoltage (one thousandth of a volt) signal from the body surface, the auric field to be recorded.

Like all investigations into uncharted areas, she did not set out to prove anything; her aim was to study the effects of shaman healing; the process of energy transfer; consciousness; the auric field and elucidate a possible energy field phenomenon as well as to understand the neuromuscular effects of Rolfing.

The following is her explanation in simple terms of the body electricity and how it is measured. Brain nerve cells, when stimulated, create electrical energy, which activates nerves. This is recorded as brain waves by an electroencephalogram (EEG). The nerve activities cause muscles to shorten and move the body, stimulate the heart, lungs, blood vessels, intestines and glands. When a muscle shortens, an electrical current is generated which can be recorded by an electromyogram (EMG). An electrocardiogram (EKG) picks up the electrical heart activity.

These three kinds of recordings can differ, one from another by frequency patterns and strengths. Brain waves under normal conditions create a characteristic slow waveform fromzeroto20 cycles per second. The heart creates a larger and faster wave up to about 225 cycles per second. The muscles, on the other hand, have a wide range from zero to 250 cycles per second, two to three cycles per second in the anal sphincter muscle and 250 cycles per second in the small fast moving eye muscles. Most skeletal muscles during a normal movement operate between 40 and 120 cycles per second, each with a built in physiological frequency signature or speed of operation, some faster and some slower, based on their location, their structure and their movement function. Each of these separate recordings is an important function of local tissue, but none of them is a measure of general health in the body.

Although we cannot explain life, we do know that electrical activity is essential for life. Most medical and biological research has tried to explain life in terms of gross measures such as heart, muscle and nerve electricity or it has unsuccessfully sought a source in the biochemistry of cells and fluids. But with recent discoveries that all cell, even subatomic particles, contain tiny electrical elements, there is a growing belief that life is electromagnetic and cannot be explained by mechanical or biochemical means.

Physics, the scientific source of all natural information about the universe, holds that all matter, which exists in space, is composed of atoms. Atoms are all the same whether they comprise inert or living matter. In each atom, electrons spin around a nucleus, throwing off some electrons, leaving an unstable state. Other electrons in the environment rush into fill the space. Some of these free electrons come from living things, others from manmade objects or the natural physical environment.

In the physical body there are two primary electrical systems. One is the well known alternating electrical current of the nervous system, the brain, neurones and the nerves, which causes muscle contraction, nerve transmission, glandular secretion and sensation. The other is a newly discovered electromagnetic system probably emanating from atoms and cells. This energy has been called an aura, though she prefers to describe it as an energy field.

This energy field is unique. It is continuous, while all the other body electrical recordings of heart, brain and muscle are off-and-on-signals: a muscle contraction is followed by a muscle relaxation; a heartbeat is followed by a quiet rest period; and a brainwave is followed by a lesser action.

The pool of electromagnetic energy around an object or a person allows energy exchange. This corona, invisible to most people, is seen at times as a halo or light-coloured mist around a living body. Although composed of the same electrons as inert substances, the human field absorbs and throws off energy dynamically. It interacts with and influences matter, whereas fields associated with inert matter react passively. Again, there have been many names associated with this human energy; chi, life force, prana, odic force, and aura.

The electromagnetic components of the human energy field can be detected with special electronic instruments, although probably this field is more complex, possibly like the little understood scaler wave, or it may be composed of undiscovered energy as illusive as ether. If the recording sensor or probe is a needle inserted into a nerveor muscle, only the very local electricity or small units are intercepted. If the electrodes are adhered to the skin surface, there is a larger signal of electrical activity, or a composite of the underlying muscles or cells.

Throughout her recordings, she placed surface sensors over the chakra where the baseline electricity was strongest, although a similar signal could be found anywhere on the body surface. Generally, the subjects were recorded while lying passively, meditating, imaging, being Rolfed or healed. Although the baseline signal she wanted was not altered by the amount of movement, if the subject was very active the accompanying heart and muscle electricity was so strong that it overshadowed the small constant energy field on the oscilloscope.

On every recording taken from the body where there are muscles, there is a resting baseline of electrical activity between muscle contractions. She believes that this is produced by all living tissue and can be described as a life activity. This has been generally considered to be a rough indicator of muscle tension and therefore not very important. Yet she noted that after

Rolfing, the baseline was higher or stronger, while a manual tension test used in physical therapy showed that the subjects were actually more relaxed.

By amplifying the baseline on the oscilloscope, she found that it was rich and changing energy. When she filtered the baseline data to remove the brain, heart and muscle frequencies (0 to 250 cycles per second), she discovered that there is a void (no electrical activity) between 250 cycles to 450 or 500 cycles per second. But from 500 cycles per second up to 20,000 cycles per second, the frequency information was contiuos. Her telemetry instrument was not capable of recording frequencies beyond 20,000 cycles per second, at the time.

She observed that every recording using body surface electrodes contained all electrical activity of the body. If taken from the heart, a powerful generator, the heart frequencies were the strongest. If taken from the muscle, the muscle depolarisation frequencies were larger, and so with the brain. But all electrical activity, including that of the auric field, was present in all telemetry recordings.

In other words, beyond the electrical frequencies of muscle, brain and heart, there is another field of energy, smaller in amplitude and higher in frequency. This electromagnetic energy is eight to ten times faster than the other biological electricity sampled from the body's surface and about one half to one third as strong as the millivoltage of a resting muscle. While numerous researchers have studied extremely low biological frequencies (ELF) and the magnetic current associated with healing, tissue health and disease, the extremely high biological frequency (EHF) electrical currents associated with mind phenomena and human consciousness were first researched in Valerie Hunt's laboratory at UCLA.

Excluding unicellular organisms, all living systems produce an electrical current in the order of millivoltage (one thousandth of a volt) a relatively strong signal that is considerably larger than the random microvoltage (one millionth of a volt) of white noise.

Dr Hunt discovered that because her field recordings were faster than neurological signals of muscles and nerves, although of similar amplitude and because these correlated with aura reader's visual reports, she considered the possibility that these might point to the elusive energy field. She also observed that before the brain wave was activated and before stimuli altered the heart rate, blood pressure or breathing, the energy field had already responded. This led her to postulate that a person's primary responses in their world take place first in the energetic field, not in the sensory nerves or in the brain.

Probably the primary reason scientists had not discovered the human energy field before, even with telemetry instruments, was because they believed that biological energy existed only to make a muscle shorten, a heart beat, or to create brain activity. Data such as a dynamic resting baseline were considered to be only an artefact of the instruments but not real data. **Einstein,** with his new model of the universe, determined that energy and matter are one – thus transforming the classical western duality. Soon the Subatomic World of "leptons" and "quarks" emerged to challenge the existing concept of the atom as the final building block of matter. The Subatomic World seems to be a complex web of inter-relationships – one could say – a "holistic pattern".

Newton's solid theories, based on a common sense view of a world where everything is governed by cause and effect, have been eroded by new facts emerging from research in quantum physics. A contemporary physicist and former student of Einstein said: "One is lead to a new notion of unbroken wholeness which denies the classical idea of the analyzability of the world into separately and independently existing parts Rather, we see that the inseparable quantum interconnectedness of the whole universe is the fundamental reality and that the relatively independently behaving parts are merely particular and contingent within the whole" i.e. the whole is made up not of indestructible, discreet particles, but of parts interconnected and inseparable within the whole. What constitutes the interconnecting threads? In the opinion of Manning "the bio-energetic phenomenon will prove to be the web that relates all living matter. Each organism, animal, plant and insect is unified in its form and function by this life energy, just as the universe may prove to be unified by a similar force field.

This view of the world as a vast oscillation of interconnecting forces was proposed by Chinese Scientists centuries ago. The Yin/Yang concept has been in existence for a long time. **Dr Fritjof Capra** discussed the interface of quantum physical and oriental cosmology in his book " The Tao of Physics". Thus, the newest of quantum physics relates to the oldest of Chinese cosmology. Medicine, as other Sciences, will have to take account of the new image of the world. **Dr Larry DosKey** relates new discoveries in modern physics to new approaches in healing sick people.

"Eventually, our concepts of how our bodies work will have to give due regard to quantum physical events and theSubatomic World. (DosKey)

MODERN HEALING

Since the discovery of bacteria, modern medicine has centered on a biochemical model of disease. Molecules and changes in molecules are the central thrust of research, while diseased tissue is the focus of diagnosis and treatment. Biochemical evidence is the basis of administering drugs with a view to altering and controlling the changes in molecules. The person is secondary to the pathology. Emotions, environment and complex energetic interactions are secondary to this biochemical malfunctioning. The regenerative power of the body is given a minor role in the process of healing. While it can be extremely effective in dealing with some diseases like pneumonia or syphilis, the biochemical model has serious limitations when dealing with disease syndromes, with functional problems and with complex chronic diseases that do not readily respond to simple cause and effect. The molecular, biochemical model, with its linear cause and effect approach, its idea of specific etiology – all solidly "Newtonian" and "Descartian" leads to a mountain of details and facts about the body but tends to lose sight of the person as an integrated entity.

The successes are undeniable and impressive. Powerful chemicals efficiently eradicate proliferating bacteria but can just as powerfully intervene in the delicate homeostasis, causing serious side-effects. They can be toxic. Furthermore, if a specific causative factor, such as a bacterium or virus,

cannot be found, then the cause and the cure, remain nebulous. It must be said that the biochemical approach has resulted in some brilliant achievements but does it fully account for the spectrum of health and disease. If there is a case to be made for research into the mystery of degeneration or regeneration in an effort to prevent the degeneration in the first place. Can we discover the factors that lead to immune deficiency (which possible leads to Candida Albicans, Epstein-Barr Virus and certainly leads to AIDS). Can the study of the subtle homeostasis of health find a place among the strong-arm tactics of biochemical and surgical intervention. The monumental effort to make medicine into a consistent science solely based on biochemical data tends to disregard the traditional art of healing based on homeostasis and bio-energy.

The acceptance of a holistic approach involves an understanding of bioenergy, homeostasis and integrity of the whole. Each person is seen as a unique individual, a complex ecological system of inter-related parts, vitalised and regulated by the bio-energy.

Each person is also in vital relationship to the outside environment, climate, family, occupation, society and cosmic forces. Disease is an expression of imbalance in this complex web of life.

Since 1988 Michael O'Doherty and Tom Griffin have proven conclusively the effectiveness of the Plexus Bio-Energy Health Care System by working on the Bio-Electrical structure of the body.

Based on their experience of having treated thousands of people, Michael and Tom now understand that this energy vibrates electrically through the body and through its own intelligence, is responsible for unlocking the coding of development and re-generation deep within the sub-atomic level of our being.

BIO-ENERGY AND RELATED CONCEPTS An Overview of Research Throughout History

Many eminent scientists, physicians and philosophers throughout history, have studied this vital life force. During the past one hundred years, however, mechanistic philosophy (the so-called "Newton Cartesean" model) has become the law. Theories of bio-energy do not fit in, so they are disregarded or ignored no matter how eminent the researcher. "The most deceiving of all prejudices is the opinion that some kind of research should be banned".

Johann Wolfgang Goethe