

The New American Medicine IV: The Future of Medicine By Michael Mannion

The concepts of God and Life Energy are the oldest ideas in the thought systems of religion and science. Both ideas can be traced back to the earliest written records of our civilization. In recent decades, many thinkers in science and religion have been moving toward the view that the words "God" and "Life Energy" are describing the same thing—the fundamental natural law or principle underlying reality.

The spiritual principle, represented by the many concepts of God and soul, and the physical principle, variously described by such terms as Life Force, qi, prana, pneuma and vital energy, have been considered irreconcilable for millennia. Today, these two ideas are playing important roles in the practice of medicine. These oldest of truths will merge, and then re-emerge in a new form, to shape the medicine of the future: Energy Medicine.

As we enter the 21st century, the alternative medicine movement has brought both the spiritual principle and the physical energy principle into the practice of medicine and into public consciousness. Conventional medicine has been forced to react to this development. The question of the effectiveness of prayer in healing has been the subject of laboratory and clinical trials. The surprising results of these trials have encouraged many conventional physicians to explore the power of spiritual healing techniques such as prayer. In their private lives, all polls show, the majority of physicians are adherents of one or another of the major religions and prayer is not incompatible with their practice. They are able to reconcile their personal religious beliefs with their public biomedical practices.

However, conventional physicians, in general, are still uncomfortable with the concept of "energy" when applied to medicine in the form of "energy healing" or "energy medicine." To practitioners of bioscientific medicine, the concept of "energy" is amorphous and unscientific; it smacks too much of mysticism. It is an interesting and significant fact that, while many medical practitioners believe in a deity and the power of intercessory prayer, they consider the concept of a life energy mystical and unscientific.

Conventional practitioners, in general, are uneasy with the ancient concepts of energy medicine—though they were endorsed by the founders of Western, Chinese and Indian medicine—but they are untroubled by some forms of energy medicine. Nuclear medicine, radiation therapy, MRI, PET and CT scans and x-rays are all examples of energy technologies that play indispensable roles in modern biomedicine. Conventional practitioners measure the body's energy with electrocardiography, electroencephalography, and electromyography. However, a majority of conventional physicians cannot conceive of harnessing the body's own energy for healing.

In contrast, for most complementary or integrative practitioners, the idea of a healing energy at work in the human body is at the heart of their practices. The goal of these therapies is to work with nature's healing energy to attain and maintain health. Self-healing

is a concept common to almost all complementary/integrative modalities. These various techniques promote self-healing by mobilizing the body's own bioenergy. However, the nature of the energy in question remains as elusive for today's practitioners as it was for the healer's of antiquity.

Whether a practitioner believes in a spiritual healing principle or a physical healing principle, the nature of the energy involved is unknown. Even when its effects are visible, the "spirit," or "energy" or "thing in itself," has not yet been demonstrated or measured scientifically to the satisfaction of most. The energy has not yet been proven to exist objectively, although, subjectively, its existence seems obvious.

Surprisingly, the spiritual principle and the physical energy principle share key qualities in common: both are unprovable objectively; neither can be fully known in its essence; both are, basically, matters of belief. Increasingly, biomedical researchers are putting complementary therapies to the test of controlled clinical trials. It remains to be seen what results will be achieved when mechanistic scientists, who are used to studying dead cells and eliminating living factors from the investigation, attempt to study nonmechanical energy processes.

Vitalism and Mechanism: The Debate Begins Again

There is a long history involved in the conflict between materialistic, reductionistic medicine and spiritual, energetic or "vitalistic" approaches to healing. Vitalism puts forth the proposition that physical and mechanical laws alone are not adequate to explain life. Vitalism in the West arose as a direct response to mechanistic medicine. (There is also an ancient vitalistic tradition in the East.) In the 17th century, scientists began to view the body as a machine, with many believing that life could be explained completely in mechanical, chemical and physical terms. This was a radical departure from the organic views of man and nature that had existed from the time of Aristotle through the medieval period. In earlier thought, there was no separation of body and mind or soul. Each interpenetrated the other. Descartes's mind-body dualism changed things radically and his influence is felt to this day.

A major problem with the mechanistic view of life is that it cannot explain human emotion, thought, sensation and movement. When a person dies, the body remains the same biochemically and physically for some time. At the mechanistic structural and chemical level, a corpse is indistinguishable from a living person. Yet, a corpse is obviously not the same as a living body. The "living" has departed. Mechanism has no explanation for what animates matter. The vitalist hypothesis was an attempt to account for the force that animates matter.

George Ernest Stahl (1659-1734), a chemist-physician, was one of the most important figures in the medical debate between vitalism and mechanism. He proposed the concept of "anima" or "sensitive soul" to explain what made living matter different from lifeless matter. Francois Boissier de Sauvages (1706-1767) took Stahl's concept into one of

Europe's oldest and most influential medical schools, Montparnasse. Paul Joseph Barthez, a student of De Sauvages, and Napoleon's physician, changed his teacher's term from anima to "vital principle," to make it sound more modern. The primary factor in life was believed to be a benevolent, self-directed healing power.

In the 19th century, the mechanistic chemical-physical view became the dominant force in science and biology. The discovery that the laws of thermodynamics could be applied to living organisms, and other discoveries in chemistry and physics, overwhelmed vitalism. Although vanquished in the world of science, vitalism found a welcome home in some schools of 19th century medicine.

The Viennese physician Franz Anton Mesmer (1734-1815) thought he had discovered the actual vital energy, which he called "animal magnetism." He felt that this energy existed in the body and in the cosmos. Mesmer believed that disease was the result of an energy imbalance; health was energy equilibrium. The experiments of Luigi Galvani (1737-1798) with the severed legs of frogs, which were experimentally caused to move as if alive, seemed to provide scientific proof of the existence of Mesmer's vital energy. Baron Charles von Reichenbach discovered an energy in crystals in the 1840s and 1850s, which he called the "odic force." Modern crystal healers are in the tradition of Reichenbach and vital energy.

Phineas P. Quimby (1802-1866) believed that "Mind" was the ultimate healing force. To Quimby, disease was the result of a disturbance of the mind. Through his "New Thought" movement, he taught that disease is nothing more than faulty thinking. The contemporary "Course on Miracles" is considered by some to be in the spirit of Quimby's work. At the beginning of the 20th century, William James noted the influence of mind-cure principles in America. Meditation, breathing and relaxation techniques, so popular today, were tools used by the Mind Cure advocates. Quimby's most famous and influential student was Mary Baker Eddy, the founder of Christian Science.

The originator of chiropractic, D.D. Palmer (1845-1913) worked as a magnetic healer for a decade before he developed his healing technique. For Palmer, disease was caused by either too much or too little energy. He believed that the life energy was housed in the nerves, which were protected by the spinal vertebra. Chiropractic manipulation released the vital energy, called the "Innate," so it could move freely and restore health. Today, chiropractic is a thriving part of mainstream medicine, despite the AMA's decades-long fight to destroy the chiropractic profession.

Homeopathy, formulated by Samuel Hahnemann (1755-1843), presented a serious challenge to allopathic medicine in the 19th century and is becoming ever more popular today. Homeopathic remedies were believed to influence and bring out the body's self-healing vital force. At present, homeopathy is the subject of serious conventional biomedical research. Increasingly sophisticated and precise conventional scientific measurements of homeopathic remedies is beginning to suggest—to the horror of allopathic medicine—that there may be something valid to homeopathy after all.

An early school of alternative medicine in America was founded by Samuel Thomson (1769-1843). Through the use of herbs, he practiced a form of treatment based on harmony with the vital force of nature. Thomsonian herbalism developed into the school of Eclectic Medicine, which lasted until 1939, when AMA power-politics drove it out of existence. Today, herbalism is returning with a vengeance to challenge AMA-style drug medicine. Until the advent of antibiotics, echinacea, a staple of Eclectic Medicine, was the most popular remedy in America. Its sales have been increasing dramatically in past years. Herbal remedies are the subject of serious clinical trials and even the AMA now advises its members to learn about herbal medicine.

Naturopathy, a vibrant form of complementary care at present, was defined at the start of the 20th century as the art of natural healing and the science of physical and mental regeneration. It is squarely in the vitalist tradition. Today, in the United States, naturopaths can practice legally in only a handful of states, but this approach is gaining in popularity and it is likely that laws will change to permit people to consult naturopaths.

Psychosomatic medicine is another modern practice that is in the vitalist camp. Mind-body medicine techniques—vitalist to the core—are now almost mainstream in America because they have a strong scientific foundation supporting them. Many private health insurance plans cover mind-body health practices. In the 1960s and 1970s, there was a resurgence of vitalism in the U.S. through the holistic health movement. A number of holistic schools of psychology have had a profound impact on American medicine.

The complementary care movement in the United States is as infused with the spirit of vitalism as conventional medicine is with the spirit of mechanistic, reductionistic thinking. The public is much more attracted to the focus on life, wellness, energy and partnership that is found in vitalism than to the emphasis on disease, pathology and depersonalized treatment that now characterizes Western biomedicine.

The mechanist-vitalist debate dominated Western medicine at the beginning of the 20th century and, for nearly 100 years, it seemed that vitalism had been defeated. Now, at the start of the 21st century, the debate has flared up again, and it appears that the concept of a Life Energy or a vital force may be supported by, not only the public and complementary practitioners, but also by conventional practitioners and credible scientific evidence.

Energy Medicine

Modern physics teaches that energy and matter are interchangeable. A living being, therefore, can be seen as a series of interpenetrating energy fields, rather than only as a collection of chemicals. Modern medicine is just beginning to feel the impact of new energy theories, from contemporary physics and ancient healing systems alike. Research indicates that there is great promise for the energy medicine in America. Human bioenergy appears to respond to a wide range of healing techniques. In addition, there is a growing body of scientific evidence supporting the validity of energetic healing methods still far outside the mainstream.

Energy Medicine has the potential to resolve the conflict between mechanism and vitalism. The concept of "subtle energy" is basic to most alternative energy healing techniques and is a subject of great interest to researchers such as those funded by organizations such as the Institute of Noetic Sciences. The reality of subtle energies seems to be supported by recent research into quantum physics. The subtle energies are used medically for both diagnosis and treatment. Among the approaches using subtle energy are acupuncture and acupressure or shiatsu; color and light treatments; craniosacral therapy; homeopathy; kinesiology; polarity; sound therapy; and spiritual or psychic healing.

It is postulated that the physical body is surrounded by an aura or energy field. Eastern medicine has long held that such energy fields exist. Religions have long believed in the same phenomenon, calling it the soul. The energy field is considered by some to be composed of a number of fields that extend outward from the body in a progression from the electro-magnetic field, through the emotional and mental, to the spiritual.

In Traditional Chinese Medicine, the life energy or qi, is believed to move through channels in the organism called "meridians." In other systems, the subtle energy is thought to flow through seven chakras (meaning "wheel" in Sanskrit). The chakras both emit and absorb energy and appear to correspond to the endocrine glands in the human body. Chakras connect with both a part of the body and with an emotional state (e.g., the pineal gland and intuition). In all energy systems, the free flow of energy is the foundation of good health; energy blockages lead to disease. There are a number of energy treatments widely used in the United States at present.

Spiritual healers believe they are transferring "Universal Energy," "Universal Light," cosmic energy, or even "The Christ Energy." These healers may find that they bring relief to people suffering from stress, depression and pain. Some touch their patients, others do not. Some use more than one modality, such as crystals, touch, sound and color.

Therapeutic touch is now used by thousands of nurses and health care professionals in the United States. This technique is licensed and therefore practitioners are allowed to touch patients legally. They are not hindered by laws that prevent unlicensed practitioners, such as those involved in psychic or spiritual healing, from touching clients. Therapeutic touch can bring substantial improvement to the physical and emotional well-being of patients.

Reiki, the Japanese word for "universal life energy," is an energetic method that uses the energy that permeates all living things to foster healing. Some Reiki practitioners touch the patient's body, some do not. But all believe they are transmitting healing energy to the patient. Anyone can learn Reiki, which is not taught formally in schools, but directly from teacher to pupil. There are over 200,000 Reiki practitioners in the world today.

Radionics is a method of healing at a distance through the use of special instruments. It was originated by Albert Abrams, a neurologist, in the 1920s. Although this technique is legal in the United Kingdom, it is banned in the United States. In radionic treatment, the patient may not even need to meet with the practitioner. Psionic treatment, founded in the 1960s

by a British physician, Dr. George Laurence, is similar to radionics. However, only licensed physicians can use this approach, which is used to treat eczema, allergies, chronic pain, arthritis, headache pain, sleep disorders and pain after surgery.

Crystal and gem therapies are also popular. The healing stones are placed on and around patients and also around the room. Some crystals and other stones are believed to absorb negative energy and promote healing. They are frequently used for chronic pain, stress, arthritis and other painful conditions. Electrocrystal therapy was developed in the 1970s by Harry Oldfield. It is said to return a patient's energy structure to a state of balance. Crystals in glass tubes are placed along energy meridians and at the patient's chakras. In so doing, an energetic vibration is set in motion that promotes healing.

Light therapies have made their way into mainstream medicine, particularly for the treatment of the "winter blues" or Seasonal Affective Disorder (SAD). Treatment of SAD involves the use of full-spectrum light in the home or workplace. Color therapists work with light to rebalance the body energetically on the physical, mental, emotional and spiritual levels. It is believed that light is absorbed by the skin, affecting the body's nervous system and biochemistry. Color is also used to influence the body's seven chakras and thus to promote health.

Tibetan monks have used sound as a healing method for millennia. It is their belief that the entire universe is vibrating—from the cell to the supernova—and that even small changes in vibration can affect health and healing. Tibetan medicine has used chanting in healing since ancient times. Modern Western practitioners employ sound therapy to find the right healing resonance for their patients, using it to treat arthritis, back pain, soft tissue damage and sports-related injuries.

Many bioenergetic therapies are now flourishing. A good number of them can trace their roots back to the pioneering work of Wilhelm Reich but few bear more than a surface resemblance to Reich's own form of practice, orgone therapy. Alexander Lowen, MD is the founder of the approach called Bioenergetics, and his former colleague, John Pierrakos, MD developed his own technique called Core Energetics. Both were students of Reich. Practitioners have formed many schools with differing approaches in which breathing exercises, physical exercises and various types of massage or bodywork are common. Fritz Perls, a former patient of Reich, founded the humanistic treatment, Gestalt Therapy, which focused more on "body language" than on verbal language. Perls was highly influential in the late 1960s and early 1970s, and his impact is felt in the holistic health movement. Arthur Janov created Primal Therapy in the late 1960s and it became widely known after John Lennon became a patient and spoke about this form of therapy.

Body-centered psychologies, body-oriented therapies, bodywork and other energetic techniques have entered mainstream American culture and are now entering the pantheons of American medicine, along with laying on of hands, therapeutic touch and massage. While these advances are all welcome, and provide benefit to many patients, they are actually methods that operate only at the surface of energy medicine. In none of the approaches available today do we find a comprehensive theory of energy at the foundation

of the practice. In none of the popular energy therapies do we find an understanding of "energy" that takes us beyond that of a concept, idea or principle.

Energy Research

A wealth of scientific research that indicates that healers can actually bring about physical, biochemical changes in physical substances. In the late 1970s, Robert N. Miller studied the healer Olga Worrall and discovered that when she focused her healing powers, she had an impact on crystals, altered hydrogen-bonding in water, and created a specific pattern in a cloud chamber, none of which were seen in the control samples used in the experiment.

Several researchers have investigated the photographic and electromagnetic effects that healers demonstrate. For example, the work of Watkins and Turner show photographic evidence that, in healing, there is an energy transfer between the healer and the person being healed. Kirlian photography confirms the existence of this energy phenomenon. Other researchers have shown that healers can have an effect on enzymes in the laboratory. Scientists also have demonstrated the healing power of laying on of hands in laboratory mice.

Bernard Grad, PhD is one of the great figures in this area of energy research. A student of Wilhelm Reich's, Grad went on to a successful research career at McGill University, influencing many who are now stepping into positions of authority and creating the new American medicine. He has shown over and over again, through rigorous scientific experimentation, the effect of healing energy in the laboratory on yeast cultures; the impact of laying on of hands on animals and plants, particularly in his first-ever controlled study of wound healing in mice; and the implications of laying on of hands for psychotherapy and the placebo effect.

There is an extensive body of research documenting the reality of healing energy and its important role in health and healing. For example, William Braud and Marilyn Schlitz have performed extensive research on healing action and electrodermal activity in human and animal studies. Dolores Krieger has demonstrated the effectiveness of therapeutic touch. Barbara Brennan has written of her work with energy auras and "Hands of Light." Wendy S. Wetzel has studied the physiologic changes associated with Reiki therapy. Ankun Kuang and colleagues have investigated the power of Qigong in preventing stroke. Many books are filled with the details of research in this field.

There are also extensive laboratory measurements of biological energy fields, dating back at least 60-70 years. Harold Saxon Burr taught at the Yale University Department of Medicine for over 40 years. In the 1940s and 1950s, he made reliable measurements of the energy potentials in animals, plants and people. Dr. Burr demonstrated that every living thing has an energy field that can be measured with electrodes on the surface. Using his methodology, Burr was able to pinpoint the time of ovulation in women and the existence of unsuspected malignant growths, based on variations in energy potential. He called this energy "LE," for life energy, and referred to the fields as L-fields.

Dr. Burr's efforts were continued by Leonard Ravitz, MD in the 1960s and 1970s. He found that energy disturbances correlated with such conditions as depression and schizophrenia. Dr. Ravitz studied the relationship between human energy fields and such phenomena as lunar cycles, solar flares and the global energy field. The work of Rupert Sheldrake in morphogenetic fields, which is highly regarded today, confirms much of what Burr and Ravitz found about the L-fields. Robert Becker, MD, an orthopedic surgeon, has taken a different approach to the study of energy fields. It is his belief that there is a DC energy current in the body which, according to Becker, is not electromagnetic in nature.

The scientific work of Gurwitsch and Rahn on mitogenetic radiation; by V. M. Inyuhin on bioplasma fields; and by Larissan Vilenskaya on the effects of UV light, all add pieces to the puzzle of the picture of energy medicine that is being assembled. Research with magnets and healing is renewing interest in Reichenbach's "odic force." Current energy research is also focusing attention once again on the energy theories of Wilhelm Reich.

The evidence being compiled suggests that all living things resonate and interact with one another's energy fields, and with planetary and cosmic energy fields. It is becoming clear that mind, thought, sensation and emotion are all energy phenomena. Modern physics is more comfortable with these discoveries than is modern medicine. But these findings are here to stay and will be incorporated into the new American medicine in a practical way. It remains to be seen how and when.

The Obstacle in the Way to Energy Medicine

What is needed—and what may be at hand already but unrecognized—is a comprehensive approach to energy medicine that moves us beyond both ancient spiritual and healing concepts and mechanistic scientific principles to an understanding of an actual tangible, physical, measurable and usable bioenergy or life energy. So far this has eluded science and medicine. In large part, this is because human beings have lost their connection with Nature.

Our distant ancestors were intimately connected to Nature in daily life and felt part of the natural cycles of the planet and the universe. In our technological society, that bond is almost completely severed. In general, the vast majority of men and women do not feel the life energy moving in them, do not perceive the energy in other living things and the environment, and do not feel their energetic connection with Nature.

The present troubled state of human sexuality is a prime example of the loss of connection between human beings and Nature. The sexual function is understood in our society, basically and overwhelmingly, in one of two ways—either moralistically or pornographically. These seemingly antithetical viewpoints are actually two sides of the same coin. Moralistic upbringing inhibits and represses natural sexuality. This inhibited and repressed natural primary sexuality then expresses itself in a distorted manner through secondary activities such as pornography.

Sentimental, romantic views of sexuality also abound on television, in popular songs, movies, plays, and in the "higher" arts such as opera and ballet. A distorted, violent, pornographic sexuality also characterizes much popular entertainment. Again, these two seeming opposites are actually inextricably linked and share a common origin—lack of gratification in natural sexual love. How common is this phenomenon?

In February 1999, a story in *The New York Times* ran under the headline, "Study Finds Dysfunction in Sex Lives Is Widespread." A report in the *Journal of the American Medical Association* revealed that 30 percent of men and 40 percent of women have no interest in sex, suffer pain during sex, cannot experience orgasm, or suffer from some other form of sexual dysfunction. One out of three American women reported that, in general, they do not want to have sex. About one in four women found sex unpleasurable and a similar percentage said they regularly did not experience orgasm. One in three men had problems with premature ejaculation or climaxing too early; 14 percent had no interest at all in sex; and eight percent found sex unpleasurable. A range of other sexual problems exist in the general population.

At present, there is almost no appreciation of natural sexuality, of sexuality as an innate bioenergetic phenomenon. It would most likely be impossible to reach a consensus on the subject or even agreement to use a term such as "natural sexuality." Who would decide what is natural? In a society like ours, where the pendulum swings back and forth between moralistic and pornographic views of human sexuality, it will be extremely difficult to arrive at an understanding of natural sexuality. But a correct understanding of the nature of human sexuality is crucial to health and healing.

If one looks at sexuality as an energy function—removed from questions of procreation, specific sexual behaviors, moral value judgments, etc.—it is possible to begin to develop a new view of human sexuality and its place in the natural scheme of things. The Life Energy, the creative energy, bioenergy and the energy of sexuality are all one, manifesting in different realms of being. Until recent years, moralism was able to block the investigation of human sexuality entirely. Today, this topic is the subject of intense research, but the focus is almost exclusively on sexual dysfunction and pathology. Because there is no general acceptance of the natural bioenergetic function of sexuality in science and medicine, there is no research in this area. Yet, a new understanding of human sexuality is the avenue to a new understanding of energy. It is the key to the development of a true new energy medicine.

In both the historical past and the present day, the vitalists and the mechanists in medicine have avoided sexuality—the major mind-body phenomenon—entirely. One can attend the top complementary, alternative, holistic, mind-body medical conferences, listen to the world's leading authorities, and never, ever hear any discussion of the nature of biosexual energy, the bioenergetic function of the orgasm, and the crucial role of full sexual gratification in health and healing. Today, as in the past, the question of sexuality brings health practitioners into conflict with the major powers in society—church, reactionary political leaders, governments, academic institutions, scientific and medical

organizations—all of which are founded on the status quo, including the present anti-sexual status quo.

Some in conventional and complementary medicine avoid investigating sexuality out of lack of knowledge; others because of hypocrisy; and still others due to a conscious desire to avoid conflict with antisexual social forces that are needed to fund and otherwise support their organizations. But there are grave consequences in continuing to avoid facing the issue of natural human sexuality. If there is to be an effective, comprehensive energy medicine of the future, medical practitioners will need to recognize the role of biosexual energy in health and healing. They will need to make the connections between bioenergy, emotions, human sexuality and health and disease.

Will this happen? There is a long way to go, and not many are willing to take up the challenge. Biosexual energy in general, and the function of the orgasm in particular, are the central mindbody or bodymind phenomena. Yet, they are almost universally ignored in conventional and complementary medical treatment. For personal and professional reasons, fearing economic and other forms of social reprisal, the best and the brightest stay far away from the investigation of natural human sexuality. However, one physician-scientist took up this challenge between 1923 and 1957. Wilhelm Reich's story is instructive, revealing what gains have been made, and how much remains to be done, in this critical area of human life.

After decades of research and study, it seems to this author that the body of work that Reich left behind forms a strong foundation for the creation of a new medicine, based on the reality of a tangible, visible, measurable, usable physical energy, one that can stand up to the strictest scientific scrutiny and be applied to the diagnosis, treatment and prevention of disease.

The Foundation of the Medicine of Tomorrow

Wilhelm Reich, a pioneering physician-scientist, was born one hundred years ago on March 24, 1897 in the easternmost region of the German-Ukrainian area of Austria. Reich was raised on a farm and was educated at home by a tutor. The foundation for Reich's revolutionary discoveries in medicine, psychoanalysis, biology and physics was laid in the early years of his life when he lived close to nature. The study of energy functions in man and nature, from libido through bioenergy to orgone energy, is the consistent theme that runs throughout Reich's work, beginning with his 1923 paper *Concerning the Energy of Drives* and continuing through his last work on cosmic energy in 1957, *Contact with Space*.

Reich's energy studies put him inside a stream of life-positive thought that has flowed through human thinking all over the world for thousands of years. In antiquity, people were aware of the life energy functions Reich later studied. In China, it was called qi (its negative form is sha). To the ancient Greeks, it was pneuma and to the Hindus, prana. Pacific Islanders called it mana. In North Africa, it is baraka. American Pueblo Indians called it Po-wa-ha; the Iroquois called it orenda; the Sioux, waken or wakonda. Reich called it

orgone.

In the late 1920s, many considered Wilhelm Reich to be the "heir apparent" to Sigmund Freud because of his valuable contributions to psychoanalysis. But Reich moved beyond psychoanalysis developed a new "body-mind" therapeutic technique at first called "vegetotherapy" (because the vegetative nervous system was involved). Later, he called his technique orgone therapy. Much of what is now variously called body work, body-centered therapy, mind-body medicine and energy medicine can trace its origins to Reich's therapeutic breakthrough into the biological realm from the psychoanalytical.

During the 1930s, Reich developed a working hypothesis: Freud's libido, sexual energy, was not merely a metaphor or philosophical principle, but a real biological energy. He undertook a series of experiments designed to study the exact nature of sexual excitation. He discovered that there is a measurable energy charge at the surface of the skin which increases during pleasure and decreases during anxiety. Reich's energy investigations of sexuality and anxiety had profound clinical implications which influenced his emerging "bodymind" therapy.

As he continued his energy explorations, Reich entered into a challenging area of research—biogenesis. From 1936 through 1939, he conducted his bion work (bion is a Greek word meaning "living") in Oslo. Bions are microscopically visible energy vesicles that exist on the borderline between the living and non-living. The experiments were captured on motion picture film (Reich was a pioneer in time-lapse microscopic cinematography). The films clearly showed living, motile protozoan formations organizing from decaying matter. Roger du Teil of the Centre Universitaire Mediterranean at Nice, France, confirmed Reich's bion experiments.

Reich was severely attacked in the Norwegian press for his bion research. Most scientists, based on their interpretation of Pasteur's experiments, believed that living things could come only from other living things. They ignored Reich's work. In his bion research, Reich has made a contribution that is not yet appreciated. He provided experimental microbiological evidence that life is being created in nature all the time, not just billions of years ago.

A contemporary biologist, Stuart A. Kauffman, asked in his 1993 work, *The Origins of Order: Self-Organization and Selection in Evolution*, "How hard is it to obtain self-reproducing systems...capable of further evolution? Contrary to our expectations, the answer, I think, is that it may be surprisingly easy." Biogenesis is a major focus of biochemical research today. A re-evaluation of Reich's bion research may lead to surprising answers in this field of study.

From 1938 to 1940, Reich continued his energy research. During this period, he discovered a new form of energy which he called "orgone" (because the energy was discovered through his study of the orgasm and because it charged organic matter). Reich's discovery of orgone energy is the most controversial aspect of his work. It is still contentious today, even among proponents of the new medicine. The functional method of thinking Reich

employed as a natural scientist led him to the discovery of the physical reality of the life energy. In contrast, Western, mechanistic, reductionistic science has either missed or "explained away" life energy functions whenever they were encountered.

Reich's investigations of orgone energy profoundly changed his work. For example, in therapy, he was no longer dealing with only words and ideas; in medicine, he was not confined to treating only secondary physical symptoms. He was working directly with the life energy itself. Sixty years ago, he had reached a stage that medicine is only tentatively approaching today. In the 1950s, Reich's orgone energy research extended beyond the living organism. He studied orgone energy functions in nonliving nature (e.g., his investigations of atmospheric energy and cosmic energy). This work provided the foundation for a new paradigm in physics, in which mass-free energy, and not matter, is primary. The evolution of Reich's energy research can be examined in the books, journals and papers he published over the course of 30 years of scientific work. Anyone concerned with the interrelationships of personal, environmental and planetary health, and with the energy involved in all these levels of healing, owes it to herself or himself to investigate this body of information.

It was mentioned earlier that many shun the investigation of biosexual energy because it brings one into conflict with powerful social institutions and forces. Many who know of Reich's life and work learned a lesson from his conflicts with society's powers that be. But perhaps it is the wrong lesson. Too many retreat from open challenge to the status quo, thinking that, in so doing, they are advancing their cause. In fact, they may be undermining their own efforts to bring about a new American medicine.

In any event, Reich was not an "arm-chair" academician or "ivory tower" scientist. He was actively engaged in the great social upheavals of his time. In Europe, in the 1920s and 1930s, Reich brought psychotherapy to working class and poor people, using his own funds to found mental health clinics. He fought for women's reproductive rights, including abortion; was an advocate for sexual education and access to contraceptives; and held mass sexual education rallies at which these and other crucial issues were discussed.

Reich was in the forefront of the struggle to protect the sexual rights of infants, children and adolescents. He wrote about the damage done by routine circumcision; by the prohibitions against infantile and childhood masturbation; and by the lack of social support for healthy adolescent sexual expression. He coined the term "sexual revolution" to describe the events he lived through. Reich wrote about the anti-life fascism of both Hitler and Stalin and worked with anti-Nazi elements in Germany.

In America, in the 1940s and 1950s, Reich was one of the first to issue warnings about the dangers to health from the excessive collaboration between the pharmaceutical and medical industries, which resulted in the promotion of drug therapies and the disparagement of all other medical approaches. He also wrote about the nuclear threat to our existence; and about the health consequences of the adulteration of our foods.

Reich was an early "ecologist." In the 1950s, he wrote about the deterioration of the

environment, the dying of the forests, desertification and the climate change he saw occurring around the globe. All of these issues are of grave concern to patients and physicians alike today.

However, in the mainstream press, Reich was vilified. In the publications of professional organizations, he was the subject of malicious rumors. The FDA conducted a ten-year campaign against Reich which culminated in a trial in Portland, Maine in May 1956. A jury found Reich guilty of criminal contempt in disobeying a 1954 court injunction against his medical and scientific work. He was sentenced to two years in prison and fined \$10,000. A U.S. court ordered the burning of Reich's books. In 1956, the U.S. government conducted four book burnings (and one year later in 1960). On November 3, 1957, Wilhelm Reich died in a Federal penitentiary in Lewisburg, Pennsylvania.

Reich was clearly ahead of his time. But, however slowly, times do change. In his best-selling book, *The Turning Point*, Fritjof Capra wrote of Reich, "...Wilhelm Reich was a pioneer of the paradigm shift. He has brilliant ideas, a cosmic perspective, and a holistic and dynamic worldview that far surpassed the science of his time and was not appreciated by his contemporaries."

In a book titled, *Can Bacteria Cause Cancer?* the author calls for Reich's bion work to be revisited and re-investigated because of its great potential value. In *Radical Healing*, Rudolph Ballentine, MD recommends Reich's book *The Cancer Biopathy* for its valuable contributions. Reich's energetic theory of cancer, forgotten for 50 years, is of great importance to anyone attempting to practice energy healing or mind-body medicine. As part of a 1997 series at The New York Open Center, organized by this author, celebrating the centennial of Reich's birth, James S. Gordon, MD said he thought it was time to subject Reich's orgone energy work to controlled clinical trials.

Wilhelm Reich left a legacy for a new generation to claim, a wealth of scientific and medical discoveries that remains to be seriously scientifically studied, developed and applied for the betterment of human society, among them:

- Microbiological work in the area of biogenesis
- Studies of the bioenergetic nature of sexuality and anxiety
- A new medical approach to the prevention of cancer and other diseases
- A theory of disease based on the presence of stagnant, immobilized life energy and a medical device to remove that deadly energy from rigid musculature
- Investigations of the antinuclear properties of orgone energy
- An astrophysical hypothesis of the superimposition of cosmic orgone energy streams as the basis of galaxy formation
- Orgone energy weather modification experiments
- Advanced mathematical gravity and antigravity equations that bear on the phenomenon of extra-terrestrial space ships and space travel

If a powerful form of energy medicine is to develop in the United States, this work on orgone energy needs to be re-examined impartially. It moves us beyond mechanistic, mystical, and vitalistic thinking to a broader and deeper comprehension of Life Energy and its role in health and healing.

In his Foreword to *The Cancer Biopathy*, Chester M. Raphael, MD wrote "Wilhelm Reich, with unerring appreciation for the relatedness of all natural phenomena...included the orgasm as a subject for serious investigation. His studies eventually led to an inquiry into the exact nature of the energy expressed in the orgasm and to its demonstration not only in the living organism but as the common functioning principle in nature."

Reich's study of the function of the orgasm revealed that it had a four-beat rhythm, captured in his orgasm formula: mechanical tension--bioenergetic charge--bioenergetic discharge--mechanical relaxation. His energy investigations removed human sexuality, and the function of the orgasm, from the realms of moralism and lascivious emotions. His work makes it possible to begin to develop a picture of natural sexuality, by seeing sexuality as a biological energy function rooted in Nature. Reich's investigations show clearly that the orgasm regulates the energy equilibrium of the body and that this energy equilibrium is essential to physical and emotional health.

Reich's research demonstrated that the sexual process is the productive life process itself, active in joy, artistic creation, intellectual achievement and procreation. In fact, it is clear that the orgasm formula is the life formula itself. The energy medicine of the future will be built upon such bedrock discoveries about humanity's bioenergetic roots in nature.

Reich's work continues to be pursued by researchers in Argentina, Brazil, France, Germany, Greece, Italy, Japan, Spain, the United Kingdom and the United States. His science, orgonomy, is slowly gaining the credibility it deserves. For example, in Germany, medical and psychiatric orgone therapy are part of the national health program.

Can this body of scientific work now receive attention and scrutiny, so that what is found valid medically scientifically may be made available for the benefit of all? The future of medicine is in the hands of the practitioners of conventional and complementary/integrative medicine and their patients. A beginning has been made by Reich. A trail has been blazed toward a powerful, comprehensive energy medicine. Who will walk it?