

## Energy Medicine, the New Paradigm to Displace the Medical Establishment

Richard Gale and Gary Null

Progressive Radio Network, June 12, 2018

During the past several decades, Complementary and Alternative Medicine (CAM) is shaping rapidly into a new medical paradigm to displace our now failing and defunct Science Based Medical (SBM) model, which supports the ultra-orthodox and conservative drug-based theory started with the Rockefeller-funded Flexner report in the early 20th century. Among the many non-conventional therapies available, the science emerging in energy medicine or "biofield" therapies, and its partner energy psychology, is proving to be the greatest challenge to Skeptical medical materialism. Underpinning the biomolecular properties of human anatomy and biology, energy medicine seeks scientific explanations for the cause and treatment of disease that occur at an atomic level. Briefly, energy medicine is "the application of extremely low level signals to the body, including energy healer interventions and bioelectromagnetic device-based therapies." [1] Therefore energy medicine shares more common ground with concepts derived from electromagnetic science and quantum physics, which govern the underlying physical laws of matter, including the anatomy and biology of our bodies and the essence of life.

The consequence has been that energy medicine is a direct challenge to the limited dominant medical paradigm, primarily pharmaceutical drug-based therapies, which rely upon the means to chemically affect genes, proteins and molecules synthesized by genetically coded proteins. Unlike conventional medicine, which parcels the human body into various organs and distinct biological systems in order to measure the level of a person's health, energy medicine, and integrative medicine in general, according to Dr. Robert Heffron, the former director of Brown University's medical school department on integrative medicine, emphasizes the treatment of a disease by targeting its energetic cause. Heffron states, "a person's overall wellness cannot be measured simply by looking at the health of various organs." [2] Evidence-based alternative medicine, on the other hand, begins with the premise that the complexity of human biology cannot be predicated upon its parts alone but needs to be viewed in the wholeness of the body's complexity as a living system.

Today, energy medicine has developed into a broad discipline that includes energy healing, acupuncture, homeopathy, bioelectromagnetic and magnet therapies, light therapy, electrodermal therapy, psycho-neuroimmunology, applied kinesiology, mind-body techniques such as meditation, and traditional hands-on healing techniques. [3] The latter can include traditional chiropractic, therapeutic touch and massage, reflexology, cranial-sacral and polarity therapies, external qigong, and intentional faith healing. Notably, Hippocrates, the originator of the physician's oath that

every new medical school student takes upon graduation described healing energy as "the force which flows from many people's hands." [4]

A large percentage of energy medicine techniques are employed for stress reduction and pain relief. Numerous peer-reviewed studies reveal a direct correlation between a variety of health conditions and illnesses with elevated stress levels, including heart disease, asthma, obesity, diabetes, gastrointestinal problems, Alzheimer's, accelerated aging and premature death. [5]. A University of Wisconsin review of clinical studies utilizing biofield therapies in cardiac patients found efficacy in reducing anxiety and stress, improved muscle relaxation, heightened sense of well-being, and a reduction in pain. [6]

If it is correct that a new theoretical paradigm is emerging that is evidence-based upon the role energy and its transmission plays to facilitate healing of the body and mind, then it is expected that its denunciation from factions within the existing medical establishment would be fierce. At present the most savage criticism is coming from the followers of Skeptical materialism and SBM.

As we described in earlier articles in this series, SBM is deeply rooted in the radical reductionist Newtonian worldview of the Skeptic movement, which now controls Wikipedia's content on medicine and healthcare. Wikipedia has kept the gates open for Skeptics and their trolls, such as Guerrilla Skeptics on Wikipedia and the Center of Inquiry, to dominate the editorial discourse about CAM theories and medical and psychological interventions. It is a mystery how Skeptics and the proponents of SBM repeatedly fail to understand that our body is much greater than the mere sum of its parts, the central premise for all of the emerging discoveries in modern systems theory now being adopted into multiple disciplines, including economics, ecology and nature conservation, climate science, etc. Consequently, SBM has been floundering one hundred years in the past while denigrating the integrity of legitimate scientific inquiry and persistent discovery.

SBM Skeptics and the pharmaceutical industry have every reason to worry about the rapid advancements being made in alternative medicine, and most important energy medicine. Their paradigmatic dominance and profits are under rising stress due to the popular demand for safer alternatives to the trail of iatrogenic injuries, illnesses and deaths resulting from prescription drugs and often unnecessary surgical procedures. Until recently the medical establishment has always held hegemony over determining what is and what is not approved medical protocol. It seems likely that for the allopathic regime to maintain its dominance, it will require the full support of the federal government to institute a legislative totalitarian police state over national healthcare. In 2012, Americans spent \$14.7 billion on CAM practitioners, such as chiropractors, massage therapists, acupuncturists, and energy medical practitioners and healers. This is almost a third of what is personally spent on conventional medical services. In addition, \$12.8 billion was spent on natural supplements, approximately 25% of what Americans spend on pharmaceutical drugs. The US National Center for Complementary

and Integrative Health, a division of the National Institutes of Health, calculates that 9% of out-of-pocket healthcare costs are spent on alternative medicine and as of June 2016 the Center estimated that 38% of adults are using CAM, including energy medical modalities, and 44% in the 50-59 age bracket.[7] Moreover, this increase is not limited to the well-educated but has been found occurring in various degrees across all income levels and racial groups.[8,9]

Skepticism's fundamentalist perspective adamantly rejects the value of the CAM practices being adopted into mainstream medicine. Its lack of self-reflection and its stubborn inability to objectively question why they are losing ground is baffling. The Skeptics' refutation of energy medicine's empirical evidence is equivalent to scientifically illiterate bureaucrats who categorically deny anthropogenic-induced climate change regardless of the numerous evidence to the contrary. Wikipedia has thrown its support with the losing side, a dying paradigm, while also committing a great disservice by preventing valuable information about safe and effective alternative therapies from reaching the public.

According to the Skeptics' Wikipedia entry, "Energy medicine, energy therapy, energy healing, psychic healing, spiritual medicine or spiritual healing are branches of alternative medicine based on a pseudo-scientific belief that healers can channel healing energy into a patient and effect positive results... While early reviews of the scientific literature on energy healing were equivocal and recommended further research, more recent reviews have concluded that there is no evidence supporting clinical efficiency. The theoretical basis of healing has been criticized as implausible, research and reviews supportive of energy medicine have been faulted for containing methodological flaws and selection bias, and positive therapeutic results have been dismissed as resulting from known psychological mechanisms." [10]

"Implausible" is a common Skeptic catch-term to deny and degrade any scientific premise that challenges Skepticism's self-cherished truths. Yet, objectively the term is meaningless. For this reason, SBM Skepticism is anti-science at its core. Since the start of the scientific method's modern era, the ethos of legitimate science has always been open to change. It is experimental, fluid and non-dogmatic. The essence of the scientific worldview that most frightens SBM Skeptics is that it is always hypothetical. Any certainty is in fact tentative until a new discovery and theory debunks it. Real science is an organic quest for knowledge and not certainty. When medicine becomes doctrinal, which appears to be Skepticism's goal, it becomes exceptionally corrosive to the public good. It undermines the alternative worldviews it confronts solely on irrational arguments. For this reason the Skeptics' often treat their scientific materialism as an idol and SBM Skepticism now warrants a warning label for being dangerous to public's health.

Skeptics have their own strategies to demonize CAM and non-conventional medical therapies they disapprove of. But there are notable patterns they hold in common and that pervade the language on Wikipedia pages. Dr. Phil Mollon at the British

Psychological Society notes that Skeptics commonly misrepresent their target in order to create a negative impression on the reader. This includes the use of subtle distortion of cited research and only cherry-picking research to support the Skeptical narrative. We find the frequent use of disparaging words, ridicule, prejudice and false indictments. In the absence of sound argument and an attention to details of the peer-reviewed literature of their target, they rely upon broad sweeping and unsubstantiated generalizations. And finally Skeptics embrace "a dogmatic assertion of what is and what is not to be termed 'science'." [11] We would also include their harboring a delusional paranoia about the motives of CAM practitioners. For this reason SBM Skeptics frequently refer to CAM therapies as "scams."

Likewise, Wikipedia Skeptics sharply criticize energy medicine's scientific theoretical rationale, which is based upon the physics of bioelectrical and biomagnetic activity: Wikipedia states, "Physicists and sceptics roundly criticize these explanations as pseudophysics – a branch of pseudoscience which explains magical thinking by using irrelevant jargon from modern physics to exploit scientific illiteracy and to impress the unsophisticated." [12] The encyclopedia also denounces bioresonance therapy as "pseudoscientific," which incorporates devices using electromagnetic waves to diagnose and treat illnesses. Relying upon SBM's preeminent source of healthcare misinformation, Quackwatch, it states, "the therapy is completely senseless and the proposed mechanism of action impossible." [13]

The good news is that the general public increasingly disagrees with Wikipedia's Skepticism.

Wikipedia's war against energy medicine and energy psychology is best exemplified in an online confrontation between Jimmy Wales and Debby Vajda, President of the Association for Comprehensive Energy Psychology (ACEP). In 2014, the ACEP posted a petition on the grassroots activist site Change.org requesting Wikipedia users to refrain from donating to the encyclopedia because of the preferential treatment given to Skeptics to ridicule and viciously condemn Energy Medicine and Psychology. The petition gained over 11,200 signatures. [14] In response, Wales wrote:

"No, you have to be kidding me. Every single person who signed this petition needs to go back and check their premises and think harder about what it means to be honest, factual and truthful. Wikipedia's policies around this kind of thing are exactly spot-on and correct. If you can get your work published in respectable journals, that is to say, if you can produce evidence through replicable scientific experiments, then Wikipedia will cover it appropriately. What we won't do is pretend that the work of lunatic charlatans is equivalent of 'true scientific discourse.' It isn't." [15]

"Lunatic charlatans?" A word taken directly out of Skepticisms' lexicon.

Every attempt ACEP and practitioners of energy psychology made to correct the Skeptics' litany of misinformation and questionable citations were rejected. References supporting their attacks on energy-based healing are grossly cherry-picked to validate

their disdain towards anything outside their orthodoxy. Vajda provided 51 peer-reviewed articles and studies, 18 which were randomized controlled studies, appearing in professional journals, including the American Psychological Association, the Journal of Clinical Psychology, the Journal of Nervous and Mental Diseases, Psychotherapy Theory Research and Practice and others showing positive statistical results outside the range of chance. In fact the volume of published scientific literature she could have provided is vastly larger. Vajda replied, "Every edit to the energy psychology Wikipedia page that attempts to reference findings from these well-respected, scientific journals is summarily deleted... The American Psychological Association does not think we are 'lunatic charlatans.' Neither does the Association of Social Work Boards, the National Board of Certified Counselors, or the National Association of Alcohol and Drug Abuse Counselors, all of which approve ACEP to provide continuing education to their professional members for the study of energy psychology. The Wikipedia page is out of step with existing peer-reviewed research on this topic, and opinionated, self-described "skeptical" editors are resisting any change." [16]

Apparently the scientific evidence was insufficient to pass Wikipedia's litmus test for scientific credibility. The page still defines Energy Medicine as a "pseudo-scientific belief." [17]

As we noted earlier, Skeptics spearheading the SBM clique are vocally condemnatory towards the assimilation of CAM therapies, energy medicine and other healing modalities into medical and nursing school curriculums, hospitals and clinics, and the federal healthcare system. Writing on the SBM blog, Scott Guvara has ridiculed medical schools creating integrative medicine departments and offering courses in alternative medicine. Displaying a frequent Skeptic jealousy and mistrust, he calls CAM practices "Trojan horses." He goes on to argue that "medicine is based upon a "rigorous foundation of science." [18] If this were true, we would expect much safer and effective drugs reaching the market; however, the opposite has been the case. Our pharmaceutical culture continues to pump out poorly researched drugs that pose serious health risks. For this reason the number of people turning their back on conventional medicine continues to rise. Other SBM Skeptics such as Mark Crislip and David Gorski equate CAM medicine with religious belief. [19]

One major hurdle energy medicine confronts has been reaching a scientific consensus for a theory of "biofields." Energy medical modalities, also known as biofield therapies, are perhaps the most mysterious and controversial CAM therapies. Although many of these approaches have existed for millennia, scientific investigation into these techniques is still pre-paradigmatic; much remains to be learned about the deeper physical mechanisms to account for these therapeutic activities and efficacy. [20] The empirical evidence is already cataloged regardless of the Skeptics' attempts to deny it or attribute it to psychological suggestion or the placebo effect. However a true paradigmatic shift cannot occur until a sound theory becomes grounded in science. Skeptics outright reject empirical evidence without the confirmation of a scientific theory

to support it. As an analogy, there is scientific consensus among astrophysicists for the existence of dark matter in the universe. Although it is neither visible by current telescopes nor measurable by modern technology, its existence is inferred and agreed upon because of its effects observed on visible matter.[21]

Wikipedia doesn't provide any useful information about biofields. Despite almost a hundred years of scientific research and peer-reviewed scientific research to identify what is now known as biofields, which previously took on a variety of names over the centuries, including vital energy and chi, the encyclopedia simply states that "Biofield therapies are intended to affect energy fields that purportedly surround and penetrate the human body. The existence of such fields has not been scientifically proven." Rather than acknowledge peer-reviewed literature supporting biofield activity, or the fact the term emerged from a committee funded by the federal government's National Institutes of Health, Wikipedia simply associates biofields with "esoteric" medicine and the paranormal. On the other hand, the encyclopedia's entries about electrophysiology (electrical properties of cells and tissue), electroreception (sensory electric fields of organisms) and bioelectromagnetics (organisms' sensor magnetic fields)--all which form a scientific basis for research and further inquiry to understand energy medicine's empirical successes--are isolated from the context of CAM.[22]

In the mid-1980s, Dr. Bjorn Nordenstrom observed bizarre coronas and halos around tumors in routine x-rays. His further investigations led him to discover that cancer tissue had distinct electrical characteristics. Later Nordenstrom treated two women cancer patients, one with ovarian cancer and another with breast adenocarcinoma. Following a single day's treatment of electrochemical stimulation the cancers vanished and eight years later both women were healthy with no clinical evidence of cancer. Nordenstrom claimed to have identified an entire system of electrical activity and communication pulsating throughout the human body, which Discover Magazine reported might be the "most profound biomedical discovery of the century." He defined this electrical circulatory system as a network of "biologically closed electric currents," which has since given rise to the electromagnetic treatment of cancer.[23] Although Nordenstrom's results have now been replicated in many clinical studies involving thousands of patients, largely outside of the US, the full significance of his revelations for energy medicine's enormous potential is still in its infancy.

Notably Nordenstrom was not a crazed doctor. Rather he had impeccable credentials as the Chairman of the prestigious Karolinska Institute's Department of Radiology in Sweden and served as chair of the scientific assembly that awards the Nobel Prize for Medicine. A true scientist, he was a staunch adherent of the scientific method.[24] Later in his life he began to explore ancient medical systems, particularly Chinese medicine and its concept of chi, and discovered these ancient theories shared much in common with his own laboratory and clinical observations. Ancient healers were already recognizing a mysterious and subtle force of energy enveloping our bodies that could only be technologically and clinically monitored thousands of years later.

As expected, Nordenstrom confronted fierce criticism from the medical establishment's close-minded bureaucracy. A September 1986 Los Angeles Times article discussing the debate quoted his opponents calling his theory "wild-eyed." A director at the National Cancer Institute said, "The theory sounds flawed... Based on what we know about cancer biology, there is no evidence that changing electrical fields have any impact on a tumor." Nordenstrom's reply was simple and applicable to Skeptics and SBM proponents today. "It's not my fault it's complex. It's not my fault that people don't understand. This is not the first time in history that this situation has occurred. People say it's controversial because it's another way to say they don't understand." [25] Similarly, when Skeptics and SBM advocates fail to understand something or a phenomenon are unable to find agreement within its narrowly defined parameters, Dr. David Hufford at Pennsylvania State University writes that it is then shrugged off as psychological suggestion, a placebo or fraud. [26]

Perhaps this is a reason why Skepticism's editorial control of Wikipedia does not include an entry for Bjorn Nordenstrom. Scientific geniuses, such as Nordenstrom, who challenge SBM's narrow belief system, are its greatest threat.

Professor William Tiller at the Department of Materials Science and Engineering at Stanford University has made it his career to study electromagnetic, bioelectromagnetic and even more allusive subtle energies. Using the dark matter analogy, subtle energy, according to Tiller, is different than electromagnetic forces, and in human biology their processes are elusive because they cannot be measured directly but its effects can be observed. Tiller believes subtle energy holds a role in human consciousness based upon research he performed on participants' intentionality to increase or decrease the pH in aqueous solutions and increase the ATP-ADP ratio in fruit fly larvae. [27]

Dr. Beverly Rubik is an internationally recognized biophysicist and a pioneer in advancing evidence-based research to promote energy medicine and biofield science. As federal agencies recognized there was growing empirical evidence supporting energy medicine and a public demand for CAM therapies, she received a Congressional appointment to chair panels at the NIH's Office of Alternative Medicine to arrive at a scientific consensus for defining biofields. The committee eventually arrived at a definition. A biofield is "a massless field, not necessary electromagnetic, that surrounds and permeates living bodies and affects the body." [28] The term "biofield" was subsequently entered in the National Library of Medicine. Nevertheless this is a preliminary working definition. Future research and discoveries will eventually substantiate and better define biofield theory. At such time, modern medicine will undergo a profound revolution.

In addition to the emerging science of biofield therapy, and empirical evidence stimulating these fields through energy medicine and psychology (such as tapping), the new medical paradigm is based upon the physics of electromagnetic frequency. Every cell in the body acts at certain frequencies. Cells function in a collective network to sustain harmony. Emotional stress or stress generated from pain, on the other hand,

produces erratic electrical vibrations that lead to cellular imbalance and in turn lead to illness and disease. There are numerous biochemical processes constantly occurring within the body with electrical stimuli. Cell membranes have electrical charges. There are amps, volts, and both static and magnetic energies within the electrical currents of our body's organs, systems and biofields and these can be observed, measured and monitored with modern medical devices and technologies. Aside from Skeptic denialism, conventional medicine already employs the principles of energy medicine daily, such as Electrocardiogram (ECG) to monitor cardiac functions, the Electroencephalogram (EEG) and Functional Magnetic Resonance Imaging (fMRI) to measure brain wave activity, and Electromyography (EMG) to evaluate the electrical activity produced by skeletal muscles.

As stated above, the emerging theory to support energy medical modalities and biofields shares more in common with physics. Recent research applying quantum theory to non-conventional therapies, such as meditation and mental stress reduction techniques, suggests the body-mind relationship is a macroscopic quantum system. Furthermore, the empirical evidence suggests the biofield plays an important role in these processes, including biophoton-mediated regulatory processes, such as ultraviolet light emission when cells replicate. Cell-to-cell communication, secretion of regulatory neurotransmitters, respiratory modulation in white blood cells and seed germination are additional cellular activities where bio-photons seem to function. According to Dr. Van Wijk at the International Institute of Biophysics in Neuss, Germany, "bio-photon research [as well as bio-photons' capacity to carry bio-information across distance due to cellular radiation] is hardly recognized in mainstream science so far." [29] Yet this is all part of the new developing biophysical sciences that continue to reinforce energy medicine's fundamental principles.

Most of us have had the personal experience of feeling an exchange of energy between ourselves and another person. We have all experienced moments of calm or fear in the presence of someone. These experiences do not require scientific evaluation or a stamp of approval by an authoritative committee to be ruled as authentic. One of the important strengths of CAM and the emerging confirmation of energy medicine and energy psychology has been the swelling of popular demand. People do something because it works for them. And when millions of people turn to CAM therapies they cannot all be written off as victims of psychological suggestion, the placebo effect, or Skeptics' censuring of alternative modes of healing as mere scams and hoaxes. This is the rhetoric of a paradigm in decline.

The great MIT historian of science and developer of a theory to explain paradigm changes within dominant scientific models, note that the dominant conventional science at the time is one that deeply rooted in past achievements that generate a stalwart foundation for future discovery. [30] On the other hand, dominance is accompanied by scientific rigidity and in the case of the pharmaceutical-based medical paradigm ruling American medicine today, it is unable to accept competition from theories threatening its control. Therefore Skepticism's inability to comprehend the fundamental principles that

define scientific and legitimate medical inquiry and discovery should relegate Wikipedia's treatment of medicine and health to the dustbin of history.

## NOTES

- 1 Rubik B, Muehsam D, Mammerschlag R, Jain S. "Biofield science and healing: history, terminology and concepts," Glob Adv Health Med. 2015 Nov;4 (Suppl): 8-14
- 2 Kowarski I, "Med schools adding integrative medicine courses." US News and World Report. September 5, 2017. <https://www.usnews.com/education/best-graduate-schools/top-medical-schools/articles/2017-09-05/integrative-medicine-courses-increase-at-medical-schools>
- 3 Rubik B, Muehsam D, Mammerschlag R, Jain S. "Biofield science and healing: history, terminology and concepts," Glob Adv Health Med. 2015 Nov;4 (Suppl): 8-14
- 4 Schiegl H. Healing Magnetism. Freiburg: Herman Verlag KG, 1983
- 5 Griffen RM. "Ten health problems related to stress that you can fix," WebMD. <https://www.webmd.com/balance/stress-management/features/10-fixable-stress-related-health-problems#1>
- 6 J. A. Rindfleisch, "Biofield therapies: anergy medicine and primary care," Primary Care, vol. 37, no. 1, pp. 165–179, 2010
- 7 Thompson, Dennis. "Alternative medicine taking hold among Americans: Report," Healthday, June 22, 2016. <https://consumer.healthday.com/alternative-medicine-information-3/mis-alternative-medicine-news-19/alternative-medicine-taking-hold-among-americans-report-712167.html>
- 8 Ibid.
- 9 "The use of complementary and alternative medicine in the United States." National Center for Complementary and Integrative Health. [https://nccih.nih.gov/research/statistics/2007/camsurvey\\_fs1.htm](https://nccih.nih.gov/research/statistics/2007/camsurvey_fs1.htm)

- 10 Wikipedia entry for "Energy Medicine" [https://en.wikipedia.org/wiki/Energy\\_medicine](https://en.wikipedia.org/wiki/Energy_medicine)
- 11 Mollon P. "Debunking the pseudoscience debunkers." British Psychological Society, 174. June 2007. 13-16
- 12 op cit. Wikipedia entry for "Energy Medicine"
- 13 Ibid.
- 14 Change.org. <https://www.change.org/p/jimmy-wales-founder-of-wikipedia-create-and-enforce-new-policies-that-allow-for-true-scientific-discourse-about-holistic-approaches-to-healing>
- 15 Lily Hay Newman. "Jimmy Wales Gets Real, and Sassy, About Wikipedia's Holistic Healing Coverage" Slate. March 27, 2014  
[http://www.slate.com/blogs/future\\_tense/2014/03/27/jimmy\\_wales\\_denies\\_petition\\_from\\_advocates\\_of\\_holistic\\_healing\\_about\\_wikipedia.html](http://www.slate.com/blogs/future_tense/2014/03/27/jimmy_wales_denies_petition_from_advocates_of_holistic_healing_about_wikipedia.html)
- 16 Ibid.
- 17 Wikipedia entry for Energy Medicine. [https://en.wikipedia.org/wiki/Energy\\_medicine](https://en.wikipedia.org/wiki/Energy_medicine)
- 18 Gavura S. "The trojan horse called integrative medicine arrives at another medical school." SBM blog. August 29, 2013. <https://sciencebasedmedicine.org/the-trojan-horse-called-integrative-medicine-arrives-at-another-medical-school/>
- 19 Gorski D. "The difference between science-based medicine and CAM." SBM blog. July 29, 2013. <https://sciencebasedmedicine.org/the-difference-between-science-based-medicine-and-cam/>
- 20 Rindfleisch JA, "Biofield therapies: energy medicine and primary care." Primary Care. 2010 March, 37(1): 165-79  
University of Wisconsin School of Medicine
- 21 Hufford
- 22 Wikipedia entry for "Biofield" <https://en.wikipedia.org/wiki/Biofield> and [https://en.wikipedia.org/wiki/Category:Biofield\\_therapies](https://en.wikipedia.org/wiki/Category:Biofield_therapies)
- 23 Rosch PJ. "Bioelectromagnetic and subtle energy medicine." Annals New York Academy of Science. 1177: 297-311 (2009)

24 Ibid.

25 Parachini A. "Cancer-Treatment Theory an Enigma to Scientific World" Los Angeles Times. September 30, 1986. [http://articles.latimes.com/1986-09-30/news/vw-10015\\_1\\_cancer-patients](http://articles.latimes.com/1986-09-30/news/vw-10015_1_cancer-patients)

26 Hufford DJ, Sprengel M, Ives JA. "Barriers to the entry of biofield healing into mainstream medicine." Global Advances in Health and Medicine. 2015 Nov; 4 (Suppl): 79-88

27 Rosch

28 Rubik B et al. "Manual healing methods" Alternative Medicine: a report to the National Institutes of Health on alternative medicine systems and practices in the United States. NIH Publications: US Government Printing Office, 1995: 113-57.

29 Van Wijk J. "Bio-photons and Bio-information," Journal of Scientific Exploration, Vol. 15, No. 2, pp. 183–197, 2001. [https://www.scientificexploration.org/docs/15/jse\\_15\\_2\\_vanwijk.pdf](https://www.scientificexploration.org/docs/15/jse_15_2_vanwijk.pdf)

30 Thomas Kuhn. The Structure of Scientific Revolutions. University of Chicago Press, 1962 pg. 10



