

MEDICINE BEYOND

Keith Scott-Mumby
MD, MB ChB, HMD, PhD

SPECIAL INTRODUCTORY VERSION

**New Dimensions Of Biology and Healing
Beyond The Everyday Laws Of Physics**

Medicine Beyond

*Biology and Healing in a World of Unseen
Structures*

Keith Scott-Mumby MD, MB ChB, PhD

Medicine Beyond by Keith Scott-Mumby, MD
Copyright © 2012-2018 Keith Scott-Mumby, MD

Published by Mother Whale Inc.
PO Box 19452, Reno, Nevada, 89511, USA

All Rights Reserved

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the written permission of the publisher. The publisher shall not be responsible for errors or omissions.

Publisher Disclaimer

This book is intended as a reference volume only, not as a medical manual. The ideas, procedures and suggestions contained herein are not intended as a substitute for consulting with your personal medical practitioner. Neither the publisher nor the author shall be liable for any loss or damage allegedly arising from any information or suggestions in this book, howsoever applied or misapplied. Further, if you have a medical problem, we urge you to seek advice from a licensed medical practitioner.

TABLE OF CONTENTS

INTRODUCTION	1
THE BODY ELECTRIC	10
THE RADIO MODEL	12
THE ELECTRIC CANCER MODEL	13
L-FIELDS	15
GEORGES LAKHOVSKY	17
A SIMPLE CANCER EXPERIMENT	20
THE PRIORÉ AFFAIR	21
ROBERT O. BECKER MD	23
THANK YOU, MR JOSEPHSON	25
MEASURING LIFE	26
MICRO-SQUIDS	29
WE ARE LIQUID CRYSTALS	30
THE SPECIAL PROPERTIES OF COLLAGEN	32
CRYSTAL MEMORY	33
WHO NEEDS A BRAIN?	34
ANESTHESIA	36
CALL ME A QUACK IF YOU WANT, BUT...	38
REFERENCES	40

INTRODUCTION

Science should leave off making pronouncements: the river of knowledge has too often turned back on itself. - Sir James Jeans, The Mysterious Universe

THE HALF LIFE OF TRUTH

This ambitious book covers an immensity of time, from disputations over the origins of our universe at the very dawn of history, to the furthest future that science can foresee ahead of us and to which the human intellect can reach out... at least for the present. Of course the picture is changing all the time. We can never know when a shocking new insight into reality, such as Einstein's relativity or Max Planck's quantum mechanics, will burst upon the stage.

Nothing stays still. As Greek philosopher Heraclitus (c. 535 BC – 475 BC) told us, everything is change. His philosophy of this is summed up in a famous phrase: “No man ever steps in the same river twice”. Incidentally, it was Heraclitus who gave us the term Logos (λόγος) in Western philosophy as meaning both the

source and fundamental order of the Cosmos. Logos appears repeatedly as the suffix –ology, meaning science or study of.

In the first edition of *Virtual Medicine*, I wrote mockingly that science seems to undergo some major upheaval every quarter of a century or so.

Something that was proven to be true is later proved to be NOT true. Science is really a shifting quicksand of opinions and squelchy “facts”. In the health field, readers will be aware there are rapid switches in what are supposed to be scientifically-proven truths. First you read that carbohydrates are good for us, then bad; saturated fat is bad and then it’s good; we should eat meat, then we shouldn’t; margarine is your best choice, now it is a dangerous option; we get all the iodine we need from bread, but the population of the Western world turns out to be dangerously deficient in this vital mineral... The discrepancies and contradictions go on and on.

The accepted idea that calling something scientific means it is a given or has been “proven” is thus a joke. The honest fact is that all truth changes. It would be hard to define anything as a lasting and permanent scientific “fact”; even gravity is now on the chopping block.

THE STATISTICS

Scholars in their halls have developed the concept of a “half-life of truth”. Half-life, remember, is the measurement of how long it takes a radio-active substance to decay to half of its initial

Medicine Beyond

activity. This can be a matter of just minutes, as for Barium-122; 29 years, as in the case of strontium-90; or millennia, in the case of carbon-14, which has a half-life of 5730 years.

But here they are using the term somewhat flippantly to mean the point at which half the knowledge base is considered to be no longer valid. So, for a given body of facts, there will be a moment in history when half of it is no longer correct; the truth will have decayed. That means the body of data has become so corrupted, it cannot be taken seriously as fact.

It was always joked at med school when I was there that half of what we learned would be out of date in five years; trouble was nobody knew which half! That's the main problem actually: once data have become unreliable, certainty is to a large degree negated. All of it becomes worthless.

Surprisingly, it is now possible to put numbers to this. It started with a team of researchers at Pitié-Salpêtrière hospital in Paris, France. Thierry Poynard and his colleagues looked at the literature for their field: liver disease, especially cirrhosis and hepatitis. The team located nearly 500 articles in this field from over 50 years and gave them to a panel of 3 experts to examine. Each expert was charged with saying whether the paper was factual, out-of-date or even disproved.

What they found was interesting. Yes, the validity of the papers had decayed significantly. It emerged that the half-life for knowledge in this field was 45 years.

In another paper I found in *The Lancet*, a pair of surgeons went through a similar procedure with published papers in their field and came up with the same figure: 45 years.

CITATIONS

This isn't pure science, of course. The numbers and dates arrived at were themselves subject to mere opinion. Clearly, a panel of old goats who are clinging to the status quo will give more credibility to older trend-setting papers than a team of young bloods, anxious to move forward into their own bright future as experts.

But there is another way to estimate when data have become obsolete and that's by measuring how often a particular paper is cited by subsequent publications. Once no one refers to the material and conclusions any more, it is understood that it is probably no longer valid.

Of course this is not an absolute judgment, because a perfectly valid paper could be overtaken by torrents of later publications, which say much the same thing and therefore the original data are not disproven.

Nevertheless, there is a point to be made and these reviews somewhat prove what I said. What is "solid science" constantly changes and evolves.

What about other fields than health? What is the apparent half-life of knowledge in physics, say, or economics?

Medicine Beyond

It has emerged that for physics, it's about 10 years for papers and 13 years for books about physics; whereas books on economics are 50% out of date after only 9 years.

CREEPING CHANGE

This is important because people often don't notice that change is creeping up on them. Things learned as a child or at med school could be completely overthrown before the end of a physician's working life, yet he or she may never notice. This is especially likely if that practitioner does not trouble to stay up to date with science—and most don't. Indeed, I have noticed, most physicians are not even up to date with changes in medicine, never mind progress in science at large!

Why am I dwelling on this at length? Because in the field of health and healing, my field, things are moving fast; so fast that my 1999 first edition of *Virtual Medicine* is w-a-y out of date and yet the medical establishment has barely registered any awareness of holistic and alternative health, never mind the validity of energy medicine!

But the medical orthodoxy is unaware of the changes in science and thinking that has crept up on them. We are talking about the "new physics", while they are still in Newtonian mode from high school days; centuries out of date science, in other words. It's no longer a good joke to scoff at energy medicine as a healing modality because, as I say often, advanced physics

doesn't just tell us that these strange phenomena could it happen; it tells us they must happen!

The entrenched dogma has, quite simply, expired.

Add to that the degradation of the data set by lying and manipulation of drug trials by Big Pharma, the deprecation of studies demonstrating the worthlessness of many extravagantly expensive procedures (like stents and bypass) and the corruption of watchdog bodies like the FDA and it soon becomes evident that the so-called science of medicine is mightily unworthy of that label.

You can throw most of medicine in the trashcan and you wouldn't lose much of value; just a few common sense procedures. Ironically, these simple things work well and have never been tested "scientifically". It's only the stuff "proven" by science that is suspect or dangerous, like Thalidomide, which was scientifically proven to be safe for pregnant women. It caused women to give birth to children with abnormal or missing limbs. How safe is that? How good is the science, in other words?

WESTERN ENERGY MODEL

One of my pet hobbyhorses is the nature of Western energy medicine. Contrary to what many other people think, I do not believe it will be a watery make over of the Chinese, Ayurvedic, or similar models.

Medicine Beyond

We have our own contribution to make and that is in the dazzling field of technology. In this book I have shared with the reader many devices which are so far beyond the limits of previous knowledge that they seem almost magical.

But then the late Arthur C. Clarke is famous for saying “Any technology which is sufficiently advanced is indistinguishable from magic”.

This was the third of three laws by him. The first, “When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong” was proposed by Clarke in the essay “Hazards of Prophecy: The Failure of Imagination”, in *Profiles of the Future* (1962).

The second law is offered as a simple observation in the same essay: “The only way of discovering the limits of the possible is to venture a little way past them into the impossible”. Its status as Clarke’s Second Law was conferred on it by others.

The third law appeared in a 1973 revision of *Profiles of the Future*. Clarke acknowledged the Second Law and proposed the Third in order to round out the number, adding “As three laws were good enough for Newton, I have modestly decided to stop there.”

SO WHY DO THIS?

Given all that I have said about change and progress, it might seem rash for any author at the cutting edge to take on a catalogue of ideas, such as this.

I have had to introduce the reader to new and challenging principles in physics and new models of cosmology—simply because medicine has a context. All of science has a context. We cannot go on ignoring the nature of life and being, as the medical profession seeks to.

But soon it will be out of date. Virtual Medicine is history and Medicine Beyond will soon follow, if I do not rewrite it relentlessly. I have created a rod for my own back.

It may be appropriate to repeat for posterity my motivation for writing this book.

It's one of my sayings that the best reason to write a book is that it's the book you personally would like to read. Virtual Medicine did not exist in 1999, but there was a clear need, so I wrote it. The same is true of Medicine Beyond. I must say I don't consider it boastful to regard myself as the number one contender for the demands of this authorship. I have a very wide range of knowledge in all fields of healing.

Not quite a Renaissance man perhaps; but pretty well educated. I have also been used to getting outstanding results as a physician over the years. Not so much because I am amazingly competent but because I espouse and put to use good advanced and proven principles that help my patients. They get well more

Medicine Beyond

often. That's about the best measure of a physician's knowledge base!

The idea of "beyond" came from my time living in Spain. The Spanish have a term *mas alla*, meaning "more other", or beyond in the sense of something metaphysical or spooky even. Critics would readily describe my work as "very other", for sure! But I take pride in such a notion. My conscious intention has been to relay and openly discuss new possibilities.

I am respectful of the fact that many of my readers are willing and active physicians who have set aside their acceptance of current dogma and are looking for a gentler, validated and more worthy approach to their craft.

I hope in these pages they too find material that is deserving of their time in study. If there are omissions or weaknesses, I ask that they be blamed on me, not on my enquiries. Errors and inconsistencies are not to be taken as proof that the propositions I bring are faulty or nonsensical. Only that I am not perfect and therefore subject to the occasional mistake.

So, this is it then... the start of an incredible voyage, a journey back through time, into the far-flung future, sideways into very peculiar backwaters, downwards into profound concepts and upwards to the light, to joy and to the divine in us all...

A journey that I call Medicine Beyond!

Las Vegas, 4th March 2015.

THE BODY ELECTRIC

The discarding of an old prejudice and the cultivation of a new outlook are not matters that can be completed in a moment. One first catches a glimpse of a new way of regarding things, and begins to see a few outstanding features of his surroundings in a new light. But he does not immediately realize that the whole scene has been transformed. Deep-seated beliefs remain, incompatible with the new outlook though they may be, and only gradually begin to take on a strange appearance and arouse misgivings. - Herbert Dingle, Astronomer Royal

It will soon be revealed why the next logical step in our survey of “hid- den structures” leads us inevitably to a new level of health awareness we may call “body consciousness.”

First, I want to start with a deeper look at the concept of holism. We use the word a lot, but what does it really mean?

Holism (and thence holistic) is a word that was originally coined by Jan Smuts, the South African soldier, statesman, and philosopher (1870- 1950). He defined it in his 1926 book, *Holism*

Medicine Beyond

and Evolution, as “the tendency in nature to form wholes that are greater than the sum of the parts through creative evolution.” Einstein himself studied Smuts’ book soon upon its publication and wrote that two mental constructs will direct human thinking in the 21st millennium: his own description of relativity and Smuts’ of holism.¹

The concept of wholeness and holism (sometimes incorrectly spelled wholism) has now become well integrated into our thinking in all spheres. Its simplicity and omnipresence belies the fact that it’s basically a 20th-century concept. There are echoes of Leibniz’s monads model here, but the German philosopher did not explain how small individual units would operate together; only that reality was made up of an infinite number of such units.

As originally conceived by Smuts, holism meant that small units and subdivisions would inevitably unite into larger wholes, which would in turn aggregate, and so on. Today we use the term mainly for wholes which are united and have been from the beginning. However, it does seem that, in a strange way, Smuts foresaw the emergence of chaos theory and strange attractors.

Let’s see how far we have progressed down the road predicted by Einstein.

THE RADIO MODEL

If you took a large number of capacitors, wires, transistors, knobs, resistors, speakers, and a battery and threw them on the table, you could not realistically hope to tune into a radio station.

Yet that is the current approach in science, biology, and medicine: the belief that by the study of the fine details of the parts, we come to understand the whole. By studying molecules (biochemistry), we learn about life; by taking apart the components of a cell, we shall better understand its function.

But the only way the heap of parts in front of you would make sense is to create the whole: the working radio. So it is with living organisms and the “program” they broadcast, which we call life. How the parts are put together and the mutually interactive functions they perform are an entire complexity and without any one part, the entire radio will cease to work and is therefore useless.

So it is with living organisms.

I have already exposed the lie on DNA (Chapter 4) and how a mere listing of its small aspects, called genes, does not tell us how the entire molecule functions nor how different parts of an organism know where they are in the whole and what structural signals apply to them, as opposed to the other cells. The purely mechanistic deconstruction of life is unworkable. There is a

living, creative entity that breathes life into the heap of electronic bits!

THE ELECTRIC CANCER MODEL

There is no more fundamental starting place for modeling health issues than cancer. I have said often, cancer is not a death knell, but it is a wake- up call, telling you your health is in ruins. It's about as bad as things can get.

Hans-Heinrich Reckeweg puts neoplasm (fancy word for cancer) as the final end game in a steady degenerative downhill process that he termed progressive vicariation. Controversial German MD Ryke Geerd Hamer, on the other hand, sees cancer as the inevitable result of severe life-changing psychic trauma. He calls it the “iron rule” of cancer, which is the whole foundation of his German New Medicine.

Using the electro-acupuncture approach (Chapter 15), an indicator read denoting a severe drop-off in energy along any meridian is highly suggestive of a cancer signal, even if it's many years before the physical tumor finally manifests. In this crossover model with Chinese traditional medicine, we learn that the electrical energy at the acupuncture point cannot maintain itself for more than a few seconds.

Cancer is the benchmark of bad!

With that in mind, let's see how the electrical model works with cancer.

I suppose we can start with Tesla (so many things start with Tesla!) It was claimed that his coil apparatus was sometimes effective against cancers. But I always heed the warning words of Robert O. Becker, who quoted studies that showed conclusively that too much energy at the frequency of mains electricity (50-60 hertz) was likely to cause runaway growth in rogue cells and was most definitely contra-indicated in the treatment of cancer. This surprises many fans of Becker.

For example, he cites a 1971 study by Russian workers Mamontov and Ivanova, which showed that industrial-strength 50-hertz electric fields tripled the division rate of cells.² Several experimenters, notably Stephen Smith, showed that an electrotherapy bone-healing device increased the division rate of cells that were already dividing rapidly, which includes skin, gut, and liver cells and also, of course, cancer cells.

Wendell Winters, a researcher working at the University of Texas Health Services Center in San Antonio, provided some of the first laboratory evidence that power frequencies can accelerate malignant growth. He exposed human cancer cells to just 24 hours of the usual 60-hertz electromagnetic field and found that a week later the cells were multiplying six times as fast as a result.

As Becker warns, an electromagnetic field doesn't distinguish between desirable and undesirable growth. Processes susceptible to DNA stimulation include healing, embryonic growth, and cancer.

Medicine Beyond

Quoting his own work and other studies, Becker concluded that only the magnetic element of an EMF had any healing potential. The electric component is hazardous.³

L-FIELDS

After Tesla, the next significant figure on the stage is Harold Saxton Burr, professor of anatomy at Yale University School of Medicine and researcher into bio-electrics during the 1920s and 30s. His remarkable book, *Blueprint for Immortality*, after several decades of research, contended that the electrodynamic fields of all living things, which may be measured and mapped with standard voltmeters, are what control each organism's development, health, and mood. He named these fields "fields of life" or L-Fields.⁴

Trees were particularly suitable for study and he wired up many specimens, some for many years. Burr was fascinated to note changes brought about by sunlight and darkness, cycles of the moon, sunspots, and seasonal changes. The L-fields changed with the seasons and the Sun's activity, growing in magnitude when the Sun was most active and fading at night, when the Sun dropped from view. He took the very intelligent line that if it affected trees, the electrical fields would apply to all of life.

Naturally, conventional science wasn't in the least bit interested in this startling discovery.

Turning to the study of humans, Burr and his colleague Dr. Leonard Ravitz noticed that human emotions affected this field.

Voltages would be high when a patient was feeling good and would drop when he or she was below par. Burr foresaw the fascinating possibility that “... psychiatrists of the future will be able to measure the intensity of grief, anger or love electrically—as easily as we now measure temperature or noise-levels today. ‘Heartbreak,’ hate or love, in other words, may one day be measurable in millivolts.”⁵ If this thought interests you, then you will almost certainly be interested in my notes on psycho-galvanometry in Chapter 14.

Other fascinating discoveries about the electrical nature of life and disease included the observation that there was a voltage rise in a woman just before ovulation, which drops again as the egg is re-leased. Healing wounds also changed this voltage.

Most remarkable of all, there were voltage changes due to malignant tissue and Burr was eventually able to predict, from reversal of the polarity across the abdominal wall, when a woman would in future develop cancer of the cervix. This anticipates the injury potential discovery of Robert O. Becker and later prognostic work with electro-dermal screening described in Chapter 19.

What Burr and his colleagues were measuring was simply voltage potential. But he himself points out that changes can be measured at a distance from the affected organ or even outside the body, holding the electrodes above the skin, showing it is therefore a true field effect; hence “Field of Life,” or L-Field for short.

GEORGES LAKHOVSKY

The next investigative genius was actually born in 1869; his seminal book *The Secret of Life* was published in 1925. This puts him ahead (chronologically) of Saxton Burr, but the reader will soon readily appreciate that progressively he belongs here in the sequence, since his visionary ideas look far forward into the world of modern biophysics.

Georges Lakhovsky was a Russian engineer who became a naturalized French citizen and was ultimately awarded the Legion of Honor for his scientific technical services during the First World War. He had to flee his adopted country before the arrival of the Nazis, and died in New York in 1942.

Like those who went before him, Lakhovsky had to endure much calumny and ridicule. As one of his supporters remarked: 'The publication of *The Secret of Life* resulted in causing great annoyance to the custodians of infallible doctrines who made up with carping verbiage what they lacked in clarity of vision.'⁶

As Lakhovsky himself put it: 'I have been attacked by physicists ignorant of biology and by biologists ignorant of physics who consequently can neither understand my theories nor judge my experiments.'⁷

This extraordinary man of diverse talents showed that recorded sunspot activity paralleled magnetic disturbances and auroras on Earth. He also established a correlation between sunspot activity and good wine vintage years.

In my own 1992 book *The Complete Guide to Food Allergy and Environmental Illness* I called attention to Lakhovsky's observation that geological terrain seems to have a potentially dangerous connection with cancer causation.⁸

Clay soils in particular, he found, were dangerous, probably because of the properties of water within the soil, whereas sandy and limestone soils had a very much lower incidence of carcinogenesis. Lakhovsky also foresaw that one day it might be possible to project images of cancer tumors as an energy disturbance onto a TV screen; today we have MRI and CAT scanners.

But it is Lakhovsky's ideas about biological radiation fields that concern us here. His fundamental scientific principle was that every living thing emits radiation. This has important health implications. According to Lakhovsky, the nucleus of a living cell may be compared to an electrical oscillating circuit. This nucleus consists of tubular filaments, chromosomes, and mitochondria, made of insulating membranes but filled by an electrically-conductive intracellular fluid. These filaments have capacitance and inductance properties and are therefore capable of working like radio transmitters and receivers.

In Lakhovsky's model, life and disease are a matter of a 'war of radiations' between the body's cells and microbes. If the radiations of the microbe win, disease and death will result. If the cell's own energy transmission wins, then health is preserved. Thus he arrived at a very advanced and quite

Medicine Beyond

defensible energetic view of disease. Lakhovsky himself went on to conduct very many experiments in this vein. The results he got were little short of startling for his time, and so one may presume there is a lot to be derived from his theories.

Albert Nodon, President of the Société Astronomique of Bordeaux, studying ultra-short wavelengths in organisms, was able to prove Lakhovsky's hypothesis. He found radiation from all living plants and animals. Dead subjects did not, of course, transmit. Nodon produced remarkable figures showing that, weight for weight, radiation from certain beetles, flies and spiders was 3 to 15 times more intense than that from uranium.

He extended his studies to humans and was able to show that our bodies emit even more intense energies than plants and animals. Nodon also obtained what were termed 'spontaneous radiographs' by placing living things directly onto photographic plates. Clear pictures were duly developed, after several hours' exposure. This forgotten research anticipated Kirlian photography by many decades. Nodon's conclusion was 'It seems probable that matter, under the influence of radiation whose wavelength is less than the electron, may be subjected to certain modifications of an unknown nature which may confer new properties on matter, different from those conferred by radiations of a much greater wavelength, and not connected with electrons.'⁹

How right he was all those years ago.

A SIMPLE CANCER EXPERIMENT

If any reader would like to follow one of his simple experiments on plant cancer, it is not difficult to perform and will provide a fascinating home workshop on the properties of biological radiation. In this experiment Lakhovsky relied on the presence of ambient radiations. Remember that today we have over a million times the intensity of ambient radiation that was present in Lakhovsky's day. Yet he was able to demonstrate conclusively that extraneous radiations can cause disease; in this case a tumor of plants.

For this demonstration, Lakhovsky took a series of Geranium plants inoculated with the Bacterium tumefaciens (= tumor-making bacteria) which causes cancer-like growths on the plants:

A month later, when the tumors had developed, I took one of the plants at random which I surrounded with a spiral consisting of copper and measuring 30 cm in diameter, its two extremities, not joined together, being fixed into an ebonite support [a rigid plastic tube, such as a spent biro pen stem, would suffice perfectly well]. An oscillator of this kind has a fundamental wavelength of about 2 meters (150 million Hertz) and picks up the oscillating energy of innumerable radiations in the atmosphere.

I then let the experiment follow its natural course during several weeks. After a fortnight, I examined my plants. I was

Medicine Beyond

astonished to find that all my geraniums or the stalks bearing the tumors were dead and dried up with the exception of the geranium surrounded by the copper spiral, which has since grown to twice the height of the untreated healthy plants.¹⁰

The oscillator was picking up and damping all kinds of atmospheric radiations. Lakhovsky bewailed the fact that so many radio transmitters were springing up (even in his day) that ‘there is no detectable gap in the gamut of these waves’. Now, with millions of microwave cellphone users and uncountable powerful transmitting antennas, we are already waking up to the fact that cancer caused by these radiations is real.

Lakhovsky was yet-another genius before his time.

THE PRIORÉ AFFAIR

Antoine Prioré (1912–1983) was born in Trieste, Italy. He received training in electrical engineering and was a radar technician for the Italian Navy during the Second World War.

It is said by Internet sources that in 1944 Prioré noticed some oranges that had been left next to some electrical equipment. These oranges remained in a fresh state while others not near the electrical equipment became rotten and putrid. He naturally wondered if the electromagnetic radiation had some kind of health-giving properties.

Over the years 1950 - 1975 Prioré built a series of electromagnetic devices producing a strong magnetic field

(600 gauss or more), for the purpose of treating cancer and other diseases.

His last device was funded by the French government, with the help of one-time Prime Minister of France Jacques Chaban-Delmas.¹¹

Prioré claimed to have cured a number of terminal cancer patients but there was much controversy. He was accused of manipulating his scientific data by the French Academy of Sciences and French journalists also accused Prioré of not understanding his own treatment technique.



In 1965, one event was said to indicate possible foul play in Prioré's experimental research. Mice with experimental cancers were sent to Prioré from the Chester Beatty Institute in England. He exposed the mice to radiation from his devices, they were sent back to the Institute. It was claimed that the mice returned to them were not genuine because they rejected new cancer grafts! That seems to me a particularly stupid criticism: that could just as easily be confirmation of his work—the mice were no longer vulnerable.

Medicine Beyond

Unfortunately, Prioré never explained his exact method, believing others would only steal it for themselves. So we are left with the arguments and accusations unsettled, in what became known as “L’affaire Prioré.”

ROBERT O. BECKER MD

After becoming noteworthy for calling the public’s attention to the biological hazards of electromagnetic fields Becker, somewhat to his dis-comfiture, was quickly “adopted” by the New Age and holistic health field as the chief scientific credibility for some of their far-flung notions. He tried to play this adulation down but, in the end, many of these theories have proven correct!

Experimenting on salamanders, Becker discovered the “current of injury,” or more exactly he stumbled across it in the Russian journal *Biofizika* (Biophysics) and began his own series of follow-up experiments. Becker, an orthopedic surgeon and twice a Nobel Prize nominee showed that living organisms propagate a DC electrical field and that this undergoes certain changes when the salamanders are diseased and injured (exactly what Burr showed). Subsequently, Becker developed elegant new theories regarding the electromagnetic regulation of life processes.¹²

But Becker went further, with more advanced measuring systems, and has been able to show that body tissues act as semi-conductors, and that this is how the life-currents are transmitted. I find this exciting because it implies the possibility

that living cells and tissues can function in the manner of a computer.

In the 1970s, Becker and his biophysicist colleague, Maria Reichman- is, were funded by the U.S. National Institutes of Health to study acupuncture scientifically. He chose to measure DC potential (electricity given off) at designated acupuncture points, and claims to have found that around 25 per cent of the points on the forearm were locatable using this method. He also showed that current is conducted by unknown channels that correspond to the stated acupuncture meridians.

According to Becker, the DC body field is not located in the nervous system itself, but in “perineural” tissues such as the glial cells in the brain and spinal cord and the Schwann cells encasing the peripheral nerves. This hypothesis would seem to conflict with the suggestion that the DC body field is correlated with the acupuncture system.¹³

It is worth pointing out here that, later in the book, I will discuss research using changes in skin resistance at acupuncture points, which may be a more accurate method of detection. Proof of the probable nature of acupuncture meridians is found in Chapter 15.

Over the years Becker has expanded his authority and knowledge to be considered one of the best-informed scientists on the big issues of bio- physics and environmental hazards, particularly those concerning the effects of electric and

Medicine Beyond

magnetic fields on living systems. His 1990 book *Cross Currents: The Perils of Electropollution; The Promise of Electromedicine* is an extremely powerfully argued and comprehensive overview of what has been going on in the last two decades in the field of electro-biology.

Some of his seminal work was on the subject of body consciousness. He showed that a fully awake, conscious organism has a definite electrical potential, head to tail; when a person is anesthetized, that electrical potential temporarily disappears. Moreover, if you switch that potential around (toe to head), you render the person unconscious.¹⁴

In the late 1960s, Becker was probably the first person to predict that the magnetic field of the brain extends outside the head. He remembers how his idea was ridiculed by the audience at a scientific meeting of the time. Yet, he was eventually proved correct. This leads naturally to SQUIDS (without tentacles!)

THANK YOU, MR JOSEPHSON

Finally today, we have gone on to develop instruments for the detection of biological energy fields. Notable among these is a device called the SQUID magnetometer. SQUID is an acronym for super-conducting quantum interference device. It has opened up a whole new world of bio-energetic science. The life field can be seen and mapped with an accuracy and sensitivity that would have been unthinkable 30 years ago.

The SQUID is based on a phenomenon known as the Josephson Effect after Brian Josephson, who predicted it in 1962 while working as a graduate student at the University of Cambridge. He received the 1973 Nobel Prize for his work. What his hypothesis means is that electrons, although we consider them particles (matter), can pass right through insulators as if they were waves.

Such a thing is impossible in the classical physics world, but natural enough in the quantum domain. We call this tunneling and we now know that Nature has many examples of this, including events inside the human body!

A SQUID consists of a Josephson detector, with an array of input coils to capture the bio-magnetic field, plus the necessary electronics to amplify and make sense out of the signal thus received. The whole setup is immersed in liquid helium, which makes the device exceedingly sensitive to magnetic fields, such as the delicate ones given off by living tissues and organs.

MEASURING LIFE

What can we do with such a sensitive device? One of the first biological experiments with a SQUID was carried out by John Zimmerman, who developed the SQUID, and his colleague David Cohen at MIT's National Magnet Laboratory in Cambridge, Massachusetts, in 1970. They showed the heart's magnetic field with vivid clarity. In fact, it was still detectable 15 feet from the body. Around the turn of the century, Dutch physician Willem

Medicine Beyond

Einthoven discovered electrical discharges from the heart. He received the Nobel Prize for Medicine in 1924 for this work.

Nowadays, routine electrocardiography is a standard part of the medical technological armory.

Each heartbeat is the result of an electrical discharge within the heart muscle; the current spreads to nearby tissues and can even be detected in the feet and hands. It travels in the blood which, being a salt solution, is an excellent conductor.

In 1821, Hans Christian Oersted showed that whenever an electric current flows in a conductor, a magnetic field is formed. If the current varies (flux), then the magnetism is even more intense. But the heart's magnetic field is very weak in ordinary terms, since the current is low. However, in 1963, Gerhard Baule and Richard McFee at the Electrical Engineering Department of Syracuse University, New York, used a pair of two million-turn coils (coils with one million loops of wire—that is, wrapped around the spindle one million times) on the chest of a subject and for the first time detected the heart's field.

It was in the same year that the tunneling or Josephson Effect was first published. Now SQUIDS can map the body's heart and other biological magnetic fields with amazing sensitivity. In 1971 Cohen went on to develop a brain magnetogram or MEG (magneto-encephalogram). The brain's field proved to be hundreds of times weaker than the heart field, necessitating that the patient be electromagnetically shielded in the room

where readings take place. Clothing must be free of any magnetic material, such as zippers, snaps, and nails in shoes.

Since then there has been a real explosion in monitoring biological magnetic energy fields. It turns out that biomagnetic fields are often more indicative of events taking place within the body than are electrical measurements taken at the skin surface. For example, the eye acts as a remarkable battery and produces a substantial field which increases with the amount of light falling on the retina; we can obtain and study retinograms. Cohen himself, in 1980, reported detection of steady magnetic activity from growing hair follicles! Every muscle action creates a field effect outside the body. SQUIDS even show that there is more intense cortical activity in finger control areas of the brains of musicians than non-performers.¹⁵

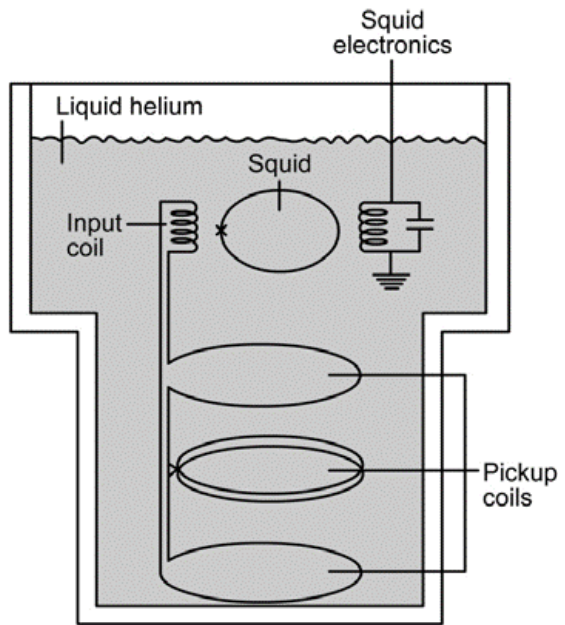
All this adds up to the fact that our living organisms are a field of teeming magnetic energy. There are other fields, too. These reflect what is going on within the body and, of course, it is entirely possible to influence the body in return. We live outside our skins! Life itself is an energy phenomenon. It no longer makes sense to practice medicine based on a biochemical or material paradigm; it's time to move over to the energy model.

So we can see that the magical, the mystical, the trendy, and what was once dismissed as hocus-pocus in fact have a very sound theoretical basis in physics and can now be measured objectively, using the necessary scientific instruments.

MICRO-SQUIDS

Researchers at the National Institute of Standards and Technology have developed a sensor that detects magnetic fields as weak as one pico-tesla (one-trillionth of a tesla). For comparison, the Earth's magnetic field is 50 million times stronger than a pico-tesla. The sensor, about the size of a sugar cube, contains about 100 billion rubidium atoms heated and vaporized into a gas.

A low-powered infra-red laser is fired into the atoms and a fiber-optic sensor detects how much of the laser makes it through the rubidium. Rubidium atoms absorb more light as the magnetic field around them increases, the quality that let the researchers actually measure magnetic fields.



The new device is slightly less sensitive to magnetic fields than a SQUID, which is considered the gold standard of magnetic sensors and is the preferred sensor in magneto-encephalography (MEG) machines.

MEG is a noninvasive procedure for imaging magnetic fields generated by electrical brain activity. It is used to explore the perceptual and cognitive process in healthy humans and to test the vision of newborns and map brain activity prior to brain surgery for removing tumors or treating epilepsy.

The downside of SQUIDs: they must be kept at -269°C to get good results, which requires they have cryogenic cooling. The new sensor, however, operates at room temperature and is small and lightweight. It can also be mass-produced, while squids are difficult to fabricate and assemble, therefore very expensive.¹⁶

WE ARE LIQUID CRYSTALS

It's time to pull a whole bunch of threads together and explain why our bodies are such an integrated, dynamic whole, readily reactive and conscious. The model that emerges when sifting through the confusing wealth of science to choose from is both surprising and fascinating indeed.

We just need to go one step beyond Becker's insight that the body is made up of semiconductors. It's actually a liquid crystal matrix. It's the key to our holism. This model was proposed and amplified by Mae-Wan Ho from the Bioelectrodynamics Laboratory in Milton Keynes, UK, and her colleague James Knight, from King Alfred's College, Winchester.

In a well-referenced paper titled "The Acupuncture System and The Liquid Crystalline Collagen Fibers of the Connective

Medicine Beyond

Tissues,” the pair reviewed supporting evidence from biochemistry, cell biology, biophysics and neurophysiology, and suggested experiments to test their hypothesis.¹⁷

They proposed that the acupuncture system and the DC body field detected by Becker and others both inhere in the continuum of liquid crystalline collagen fibers that make up the bulk of the connective tissues. It constitutes a “body consciousness” working in tandem with the “brain consciousness” of the nervous system.

Harold Saxton Burr found that the electro-dynamical field of life can be detected in all early embryos and in plants and animals that do not have neural or perineural tissues and therefore it is independent of the nervous system.¹⁸

It is likely that the DC field is functionally interconnected with the nervous system, and yet exists, to a large degree, outside the nervous system. One reason for supposing this is the fact that under a variety of conditions, the speed of communication in our body is much faster than can be accounted for by the known speed of nerve conduction, and nerves simply do not reach all parts of our body.¹⁹

Mae-Wan Ho proposes that both the DC electro-dynamical field and the acupuncture system have a common anatomical basis. It is the aligned, collagen liquid crystalline continuum in the connective tissues of the body with its layers of structured water molecules supporting rapid semi-conduction of protons.

THE SPECIAL PROPERTIES OF COLLAGEN

The clue to the intercommunication function of connective tissues lies in the properties of collagen, which makes up 70% or more of all the protein in the connective tissues. These connective tissues, in turn, form the bulk of the body of most multicellular animals. Collagen is therefore the most abundant protein in the animal kingdom.²⁰

Recent studies reveal that collagen (actually a group of similar chemical substances) is not just a material with mechanical properties. Instead, it has dielectric and electrical conductive properties that make it very sensitive to mechanical pressures, pH, and ionic composition.²¹

The electrical properties depend, to a large extent, on the bound water molecules in and around the collagen triple-helix. Three populations of water molecules associated with collagen have been identified:

1. the interstitial water, very tightly bound within the triple helix of the collagen molecule
2. bound water, corresponding to the more loosely structured water-cylinder bound on the surface of the triple helix
3. free water filling the spaces between the fibrils and between fibers²²

Medicine Beyond

Mechanical pressure on any part of the liquid crystal system results in an immediate global current of transformation. Also, the application of a current will affect the nature of the ground matrix, exactly as Becker found with his current of injury and anesthesia experiments.

The existence of the ordered network of water molecules, connected by hydrogen bonds and interspersed within the protein fibrillar matrix of the collagens, is especially significant, as it is expected to support rapid jump conduction of protons—positive electric charges—and this has been confirmed by dielectric measurements.²³ And note this: one outstanding characteristic of this form of semi-conduction in condensed matter is that it is much faster than electrical signals by the nerves. Thus the “ground substance” of the entire body may provide a much better intercommunication system than the nervous system. Ho and Knight actually speculate that the nervous system may indeed be a mechanism for slowing down signal transmissions to more appropriate speeds.

All very fascinating, once the full model is grasped.

CRYSTAL MEMORY

It's important to understand that the crystal structure of collagen will retain memory. According to Mae-Wan Ho, the collagens and bound water form a global network, in which there will be a certain degree of stability, or resistance to change. This retention constitutes a kind of memory, which may

be further stabilized by cross-linking and other chemical modifications of the collagens. Of course it will also have the capacity to register new experiences, as all connective tissues, including bones, are not only constantly intercommunicating and responsive, but also undergo metabolic turnover like the rest of our body.²⁴ Memory is thus not inherited in structure, as the mainstream physiologists insist, but is dynamically distributed in the structured network and the associated, self-reinforcing circuits of proton currents, the sum total of which will be expected to make up the DC body field itself.

Rolfers and John Upledger fans will also recognize that tissues are able to hold onto a tissue memory or “engram,” as first investigated by Lashley. It’s not surprising that he (Lashley) removed almost all rat brain tissue and yet the living organism was still able to retain a memory of a maze, since memory is not confined to the brain.

WHO NEEDS A BRAIN?

This crystal memory effect may be at least a partial explanation of the remarkable phenomenon of humans functioning with virtually no brain!

In 1980 Roger Lewin wrote a famous paper, published in the journal *Science*, concerning the research of the late Dr. John Lorber, professor of neurology at the university of Sheffield, UK. Its startling title was “Is Your Brain Really Necessary?” It goes on

Medicine Beyond

to answer that question with very definite proof we do NOT need a brain.²⁵

When Professor Lorber, as Sheffield's campus doctor, was treating one of the mathematics students for a minor ailment, he noticed that the student's head was a little larger than normal. The doctor referred the student to professor Lorber for further examination.

The student in question was academically bright, had a reported IQ of 126 and was expected to graduate. When he was examined by CAT-scan, however, Lorber discovered that he had virtually no brain at all. The student had less than 1 millimetre of cerebral tissue lining the skull, a condition called hydrocephalus, in which the cerebrospinal fluid pressurizes and destroys the brain.

Despite no brain, this Sheffield student had lived a perfectly normal life and went on to gain an honors degree in mathematics. His case is by no means as rare as you might think.

Professor Lorber eventually identified several hundred people who had very little actual brain tissue but who appeared to be normal intelligent individuals. Some of them he described as having 'no detectable brain', yet they had scored up to 120 on IQ tests.

The real truth, of course, is that we are not our brain. At best, the brain functions as a "tuner" to information fields out there

in the surroundings. That's why, when you close your eyes and look at a mental picture, it seems to be outside your head. It is!

ANESTHESIA

That bound water plays a crucial role in conscious experience is supported by recent evidence that anesthetics act by replacing and releasing bound water from proteins and membrane interfaces, thus destroying the hydrogen-bonded network that can support proton jump-conduction.²⁶ I have already indicated that Becker found that general anesthesia also leads to the complete attenuation of the DC body field. It would be of interest to study the conductivities of collagen equilibrated with different solvents and anesthetics. We would predict that collagens equilibrated with anesthetics will show a decrease in conductivity compared to an equivalently hydrated sample.

Although brain and body consciousness are normally coupled to each other, they may decouple under certain circumstances. Indeed, Mae- Wan Ho asserts that brain consciousness associated with the nervous system is embedded in body consciousness and is coupled to it, rather than superordinate. This one sentence alone transforms all of the life sciences, if you think it through!²⁷ Surgical patients under general anesthesia have been known to regain (brain) consciousness of pain, but not the ability to move or to express their distress. This might now be reinterpreted in terms of body consciousness having

Medicine Beyond

been insufficiently reduced, so pain is felt, but the brain remains “under,” so movement cannot take place.

In contrast, acupuncture has been successfully used to anesthetize patients who are fully awake. The inference there is that body consciousness is reduced, but not brain function. Observations such as these have a great deal to teach us about the nature of consciousness and being, never mind brain function and anesthetics.

Further evidence that brain and body consciousness are to some extent independent is Becker’s observation that during a perceptive event, local changes in the DC field can be measured half a second before sensory signals arrive in the brain.²⁸

Similarly, Libet et al. produced evidence suggesting that a readiness potential precedes the “decision” of a subject to move an arm or a leg.²⁹ It appears that the activities in the brain may be preconditioned by the local DC field. Materialists, desperate to prove we are just jelly after all (the brain) insist this means that a physical brain change precedes any decision being made. It does not. It simply moves the sequence further backwards.

Thought is not material.

CALL ME A QUACK IF YOU WANT, BUT...

The future of medicine is HERE.

But no one is talking about it. Why?

Scientists are beholden to foundations that provide grants... or the universities that pay their salaries.

They don't want to risk their reputations or their money by sharing these groundbreaking discoveries — even if it could save lives.

But there is hope.

My livelihood comes from you, dear reader. So, everything I do is in your best interest. Science moves fast! Healing modalities change...and I keep up with the latest advancements.

I don't care if people call me a quack or a lunatic. I'm going to share all the most cutting-edge breakthroughs in medicine with you — no matter what.

Other scientists and doctors may be afraid to offend their corporate or government sponsors... But not me.

Medicine Beyond

I've just discovered some groundbreaking advances in science and medicine. Advances that could start healing you TODAY.

And I'm going to shout them from the rooftops.

I've [created a special book and a 7-part video series](#) with 12 hours of cutting-edge info! All based off my latest findings and a groundbreaking seminar that I gave that was hailed as the triumphant medical education sensation of the year, **on these healing breakthroughs.**

Don't delay! What your doctor won't tell you CAN hurt you.

[Click here to see it for yourself!](#)

REFERENCES

-
- ¹ http://en.wikipedia.org/wiki/Jan_Smuts
- ² Bulletin of Experimental Biology and Medicine (February 1971), Vol. 71, Issue 2, pp 192-193
- ³ R.O. Becker, and Gary Seldon, *The Body Electric*, William Morrow, New York, 1985, p. 296
- ⁴ H.S. Burr, *Blueprint for Immortality: The Electric Patterns of Life*, London: N. Spearman, 1972
- ⁵ H. S. Burr, *Blueprint for Immortality* (Saffron Walden: C W Daniel and Co, 1972)
- ⁶ G. Lakhovsky, *The Secret of Life* (True Health Publishing Co, 1951 [English translation copyright 1970 by Mark Clement]): 3
- ⁷ *Ibid.* 222
- ⁸ K. Mumby, *The Complete Guide to Allergy and Environmental Illness*, Thorsons, London, 1993, p. 90
- ⁹ A. Nodon, 'Les nouvelles radiations ultra-pénétrantes et à cellule vivante', *Revue Scientifique* 22nd October 1927: 609
- ¹⁰ Lakhovsky, *op cit.* p. 111
- ¹¹ http://en.wikipedia.org/wiki/Antoine_Prioré
- ¹² R. O. Becker, *The Body Electric*, Quill (William Morrow), New York, 1985
- ¹³ R.O. Becker, *Cross Currents. The Promise of Electromedicine, the Perils of Electropollution*, Los Angeles: Jeremy P. Tarcher, Inc., 1990
- ¹⁴ Becker RO, *The Body Electric*, Quill (William Morrow), New York, 1985, p.99
- ¹⁵ J. L. Oschman, 'What Is Healing Energy? Part 2: Measuring the Fields of Life', *Journal of Bodywork and Movement Therapies* January 1997: 117–22.
- ¹⁶ T.H. Sander, J. Preusser, R. Mhaskar, J. Kitching, L. Trahms and S. Knappe. Magnetoencephalography with a chip-scale atomic magnetometer. *Biomedical Optics Express*. Vol. 3, Issue 5, pp. 981–990. Published online April 17
- ¹⁷ *Am J Chin Med.* (1998), 26(3-4), pp. 251-63
- ¹⁸ H.S. Burr, H.S., and F.S.C. Northrup, "The Electro-Dynamic Theory of Life," *Quart. Rev. Biol.* 10, pp. 322-333, 1935
- ¹⁹ Ho, M.W.: Quantum Coherence and Conscious Experience. *Kybernetes*, 26: 265-276, 1997

Medicine Beyond

- ²⁰ Knight, D. and D. Feng, Collagens as liquid crystals. Paper presented in British Association for the Advancement of Science, Chemistry Session, Molecular Self-Assembly in Science and Life, Keele, 1993
- ²¹ Leikin, S., V.A. Parsegian, D.C. Rau and R.P. Rand. Hydration forces. *Ann. Rev. Phys. Chem.* 44: 369-395, 1993
- ²² S. Peto, and P. Gillis, "Fiber-to-Field Angle Dependence of Proton Nuclear Magnetic Relaxation in Collagen", *Magnetic Resonance Imaging* 8 (1990), pp. 703-712
- ²³ N. Sasaki, "Dielectric Properties of Slightly Hydrated Collagen. Time-Water Content Superposition Analysis", *Biopolymers* (1984) 23, pp. 1725-1734
- ²⁴ Ho, M.W. *The Rainbow and the Worm, The Physics of Organisms*, 2nd ed., World Scientific, Singapore, 1998
- ²⁵ Roger Lewin (December 12, 1980). "Is Your Brain Really Necessary?" *SCIENCE* 210 (4475): 1232–1234. doi:10.1126/science.7434023. PMID 7434023
- ²⁶ Tsukamoto, I. and K. Ogli. Effects of anesthetics on the interfacial polarity of membranes - evaluated by Taft's polarity parameters. *Prog. Anesth. Mech.* 3: 368-373, 1995.
- ²⁷ Ho, M-W: Quantum Coherence and Conscious Experience. *Kybernetes*, 26: 265-276, 1997
- ²⁸ Becker, R.O. *Cross Currents. The Promise of Electromedicine, the Perils of Electropollution.* Jeremy P. Tarcher, Inc., Los Angeles, 1990
- ²⁹ Libet, B., E.W. Wright, Jr., B. Feinstein and D.K. Pearl, Subjective referral of the timing for a conscious sensory experience. *Brain* 102: 193-224, 1979