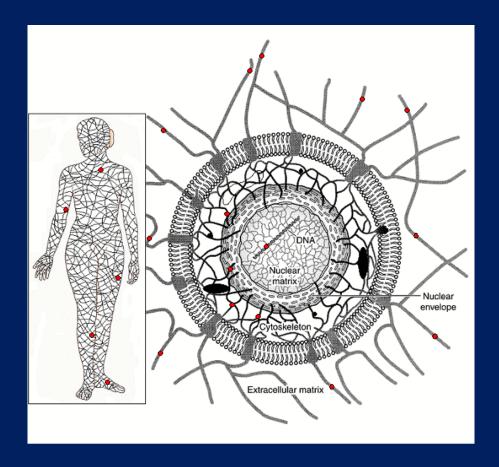
### CSO Saturday, June 5, 2021, 10:00 am to 12:00 pm

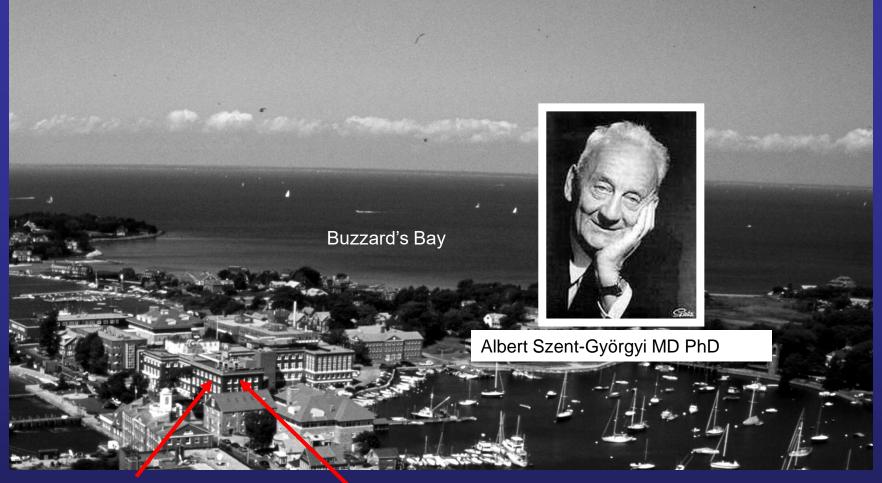
the living matrix
latest water research
scalars
homeopathy
the origin of form in cells and tissues
structure of space and electromagnetic fields



### The Living matrix

#### My introduction to

the science of energy medicine:



Oschman's lab

Szent-Györgyi's laboratory

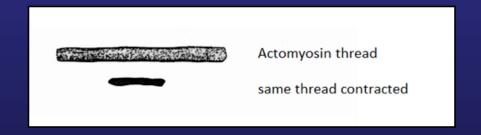
1980's: The Marine Biological Laboratory, Woods Hole, Massachusetts



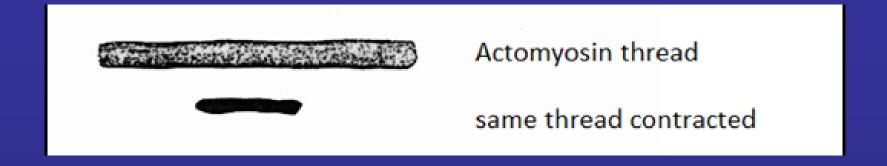
Albert Szent-Györgyi (1893-1986) MD, Budapest, 1917 PhD, Cambridge, 1927



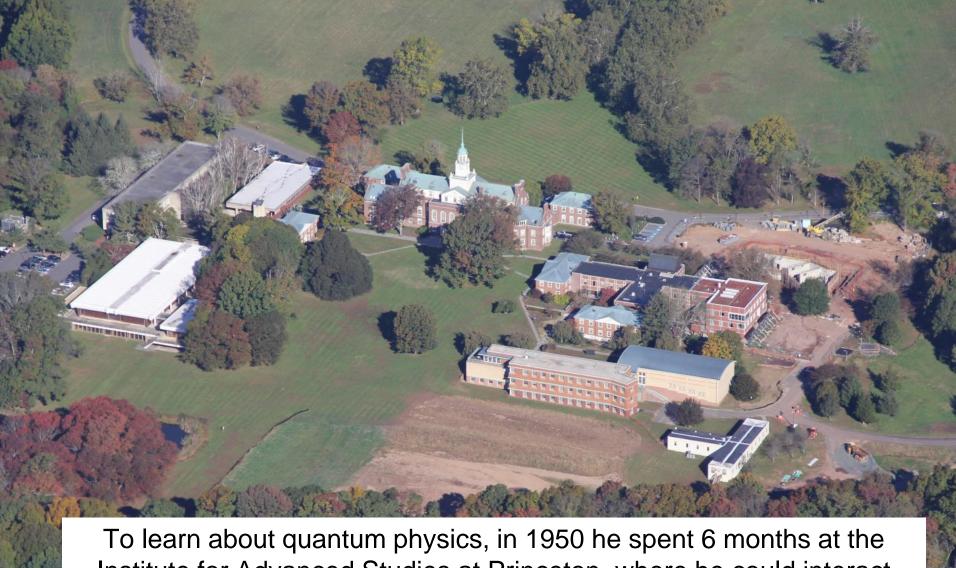
Nobel Prize 1937 Synthesis of Vitamin C from Hungarian paprika



Lasker Award 1954
Contraction of muscle proteins *in vitro*triggered by addition of calcium and
ATP



To see these little artificial muscles jump for the first time was, perhaps, the most exciting experience of my scientific life. These studies formed the foundation for muscle research in the following decades.



To learn about quantum physics, in 1950 he spent 6 months at the Institute for Advanced Studies at Princeton, where he could interact with the founders of quantum physics. Albert Einstein was also a resident at the time.

### Deficiency diseases:

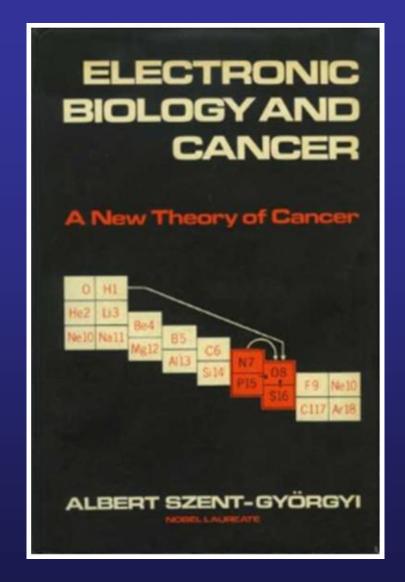
### Deficiency diseases:

Scurvy – vitamin C Rickets – vitamin D deficiency Osteoporosis – calcium deficiency Beriberi – vitamin B-1 deficiency Goiter – iodine deficiency Anemia – iron deficiency Pellagra – niacin (vitamin B 3)

Electron deficiency – lack of earth contact



July 1972
Thursday evening lecture: *Electronic Biology and Cancer.* 





1955: His wife, Marta (1910-1963), pinning an American flag on him in commemoration of his becoming a naturalized citizen.



1955: With his daughter Cornelia ("Little Nelly") in Italy.

The fact that biology is unable to solve some of the most important everyday problems of medicine (such as cancer and heart disease) while harvesting the most brilliant successes in other fields, indicates that there are gaps and uncharted territories in our basic knowledge which research is unable to penetrate.

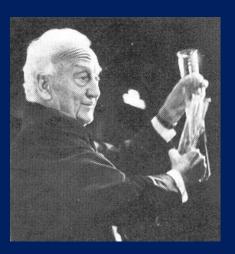
~Albert Szent-Györgyi (1978) The Living State and Cancer

He thought energy was the gap and uncharted territory in our basic knowledge.

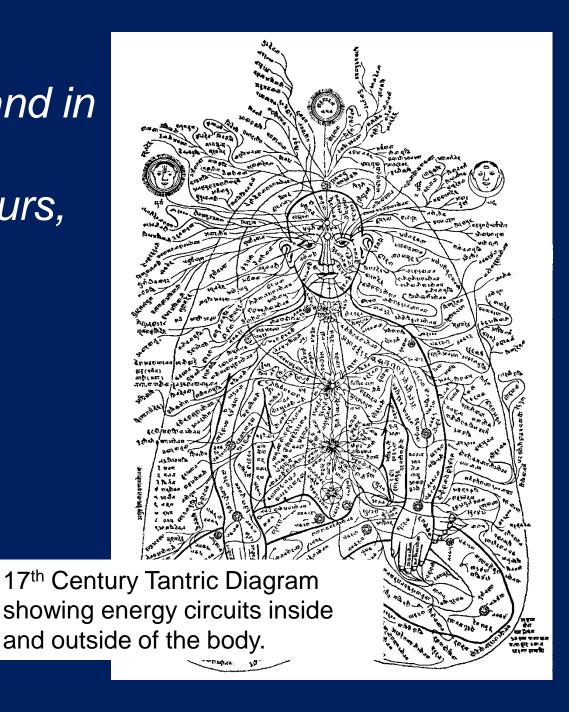


Albert Szent-Györgyi

In every culture and in every medical tradition before ours, healing was accomplished by moving energy.

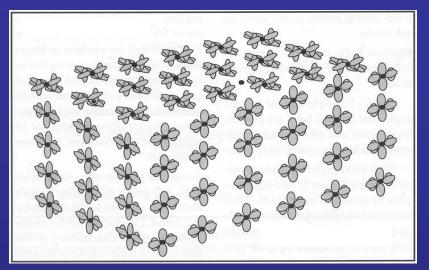


Albert Szent-Györgyi



In 1941, Szent-Györgyi made an historic presentation at the Korányi Memorial Lecture in Budapest. His talk was published in both Science (Towards a New Biochemistry?) and Nature (The Study of Energy Levels in Biochemistry). The remarkable insight that was the topic of his presentation was that proteins are semiconductors, rather than insulators, as had been thought previously. This idea explained how free electrons could be generated and could convey energy from place to place within an organism. He introduced these new ideas as follows:



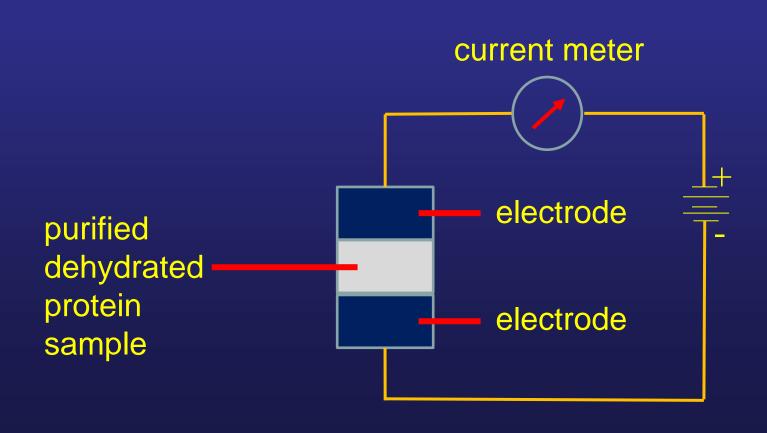


If a great number of atoms be arranged with regularity in close proximity, as for example in a crystal lattice, single [valency] electrons cease to belong to one or two atoms only and belong instead to the whole system. A great number of molecules may join to form energy continua. Along which energy, namely excited electrons, may travel a certain distance.

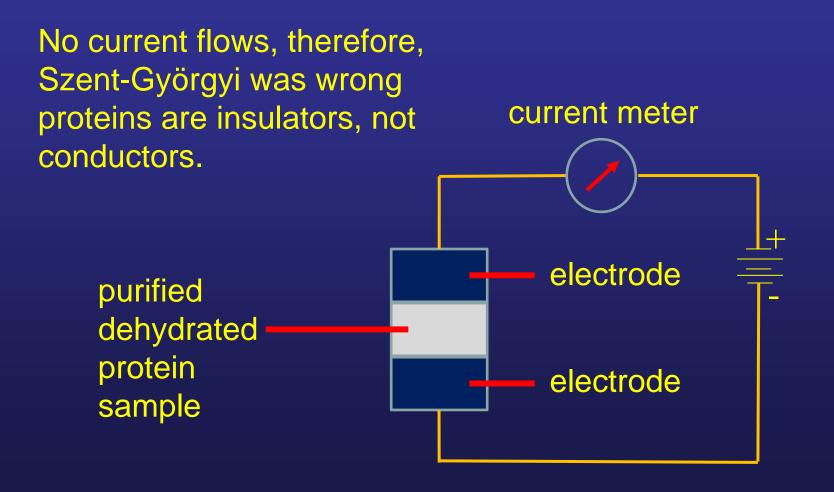
Proteins may be semiconductors!

~ Albert Szent-Györgyi (1941) Towards a new biochemistry? *Science* 93:609.

# Biochemists were sure he was wrong and set about to prove it.



# Biochemists were sure he was wrong and set about to prove it.



And so it was for many years.

Ask anyone who knows about proteins today, and they will tell you that the idea that proteins are semiconductors is utter nonsense.

#### Jump forward 65 years from 1940:

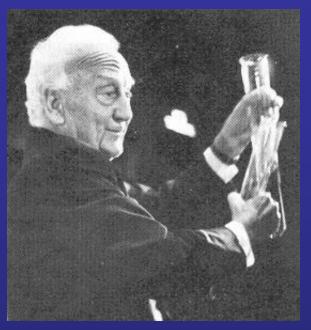
"The seminal ideas from which molecular electronics has developed were the theories of molecular conduction advanced in the late 1940's by Albert Szent-Györgyi and Robert S. Mulliken."

Hush, N.S., 2006. An overview of the first half-century of molecular electronics. Annals of the New York Academy of Sciences 1006: 1-20.

Robert S. Mulliken and Albert Szent-Györgyi developed the enabling science of molecular conduction, an aspect of molecular electronics that, to this day, remains of paramount importance.

~N. S. Hush (2006)

Miniaturization down to single molecules brings the scale of electronic circuits down to a regime where quantum mechanics effects are important.





Life is too rapid and subtle to be explained by slow moving chemical reactions and nerve impulses.

~Albert Szent-Györgyi



# C:\Users\ADMIN\Desktop\2021\THREE LECTURES FOR MAY 2021\Scared kitten jumps - YouTube.flv









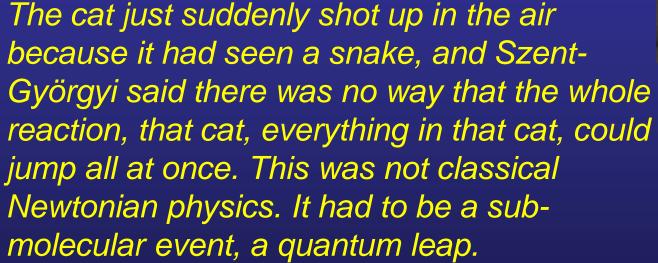














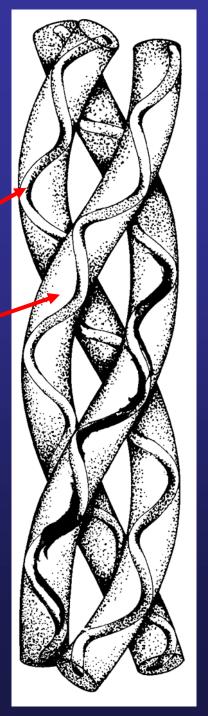
Ron Pethig

~Interview with Ronald Pethig, August 20, 2004 <a href="http://profiles.nlm.nih.gov/WG/B/B/L/W/">http://profiles.nlm.nih.gov/WG/B/B/L/W/</a>

## Collagen is a semiconductor!

Collagen protein

Hydration shell



Gascoyne, Pethig and Szent-Gyorgyi, 1981. Water structure-dependent charge transport in proteins. Proc. Natl. Acad. Sci. 78:261-265.

A small increase in water content can yield a huge increase in conductivity.

Search and Discovery

A Tribute to Albert Szent-Györgyi

BENJAMIN KAMINER

1976 Symposium held at Boston University School of Medicine



Peter Gascoyne and Ron Pethig



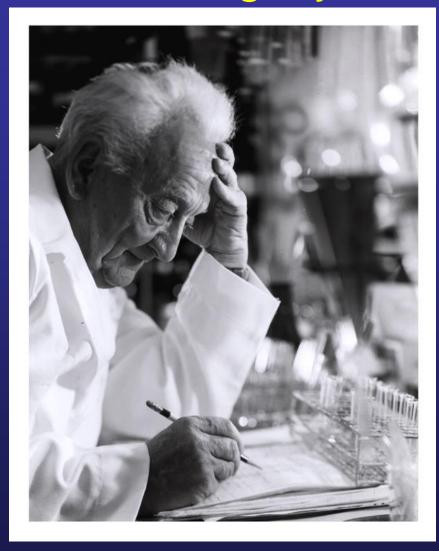
electron spin resonance spectrometer



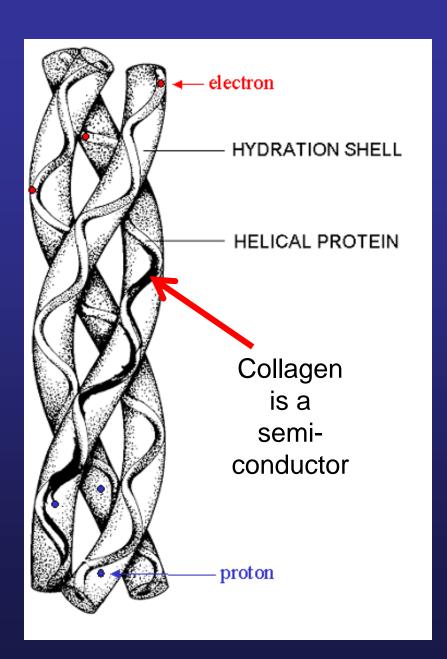
Peter Gascoyne and Ron Pethig

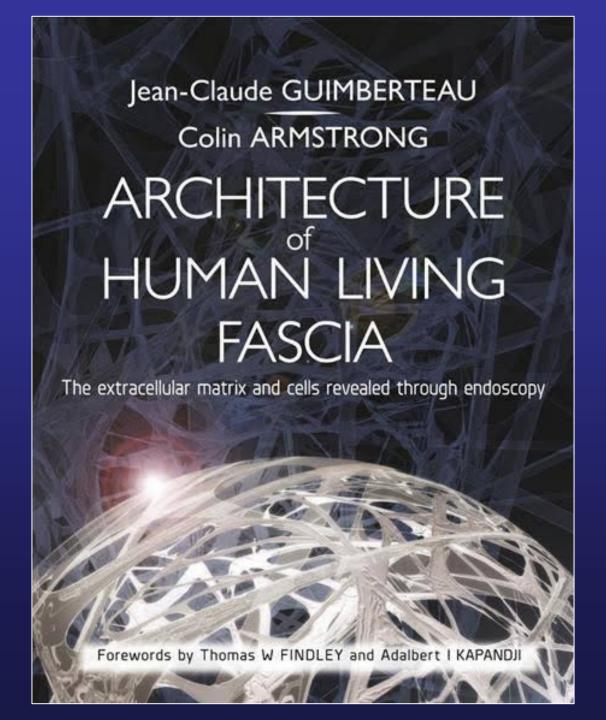
CONFIRMED THAT PROTEINS ARE SEMICONDUCTORS.

### His legacy:



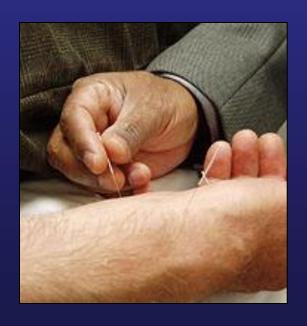
Albert Szent-Györgyi





# The New England School of Acupuncture

- Kiko Matsumoto
- Stephen Birch



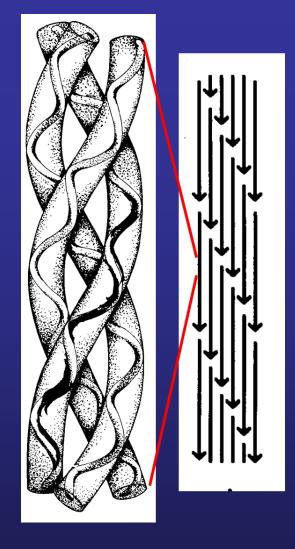
Han Shu, 16 A.D.
Nan Jing, 100 A.D.
Wan Shu He, 3rd century A.D.
Chen Yan, 1174 A.D.
Hua Shou, 1361 A.D.
Yu Bo, 1577 A.D.
Ippo Okamoto, 1703 A.D.
Royoan Terashima, 1712 A.D.
Xie Lin, 1895 A.D.
Wu Kao Pan, 1980 A.D.

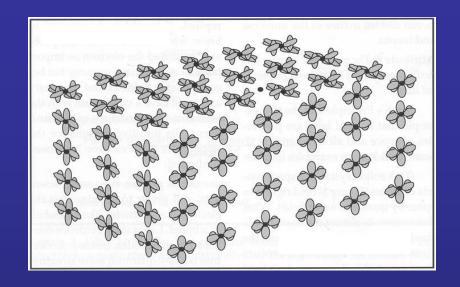
# 膜膏膜肓絡膜膏

- Fat, greasy membranes
- Fasciae
- Systems of connecting membranes
- That through which the yang qi streams

~Mansumoto & Birch

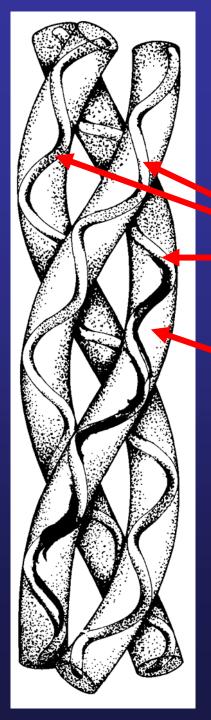






The collagen triple helix is the most abundant protein in the human body.

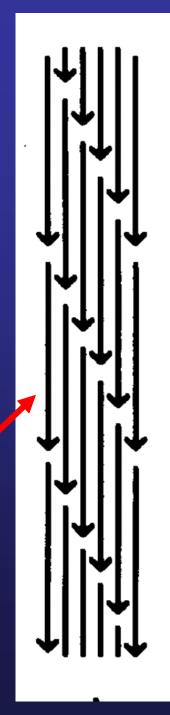
Much of the human body is crystalline.

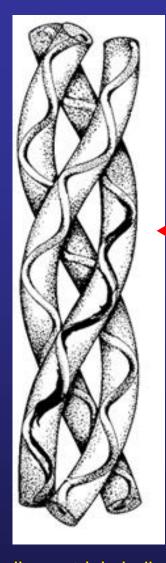


collagen protein

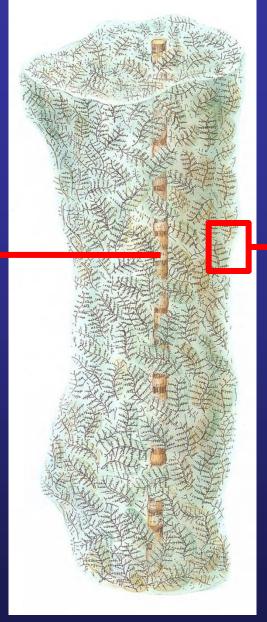
hydration shell

crystalline <a>arrangement</a>

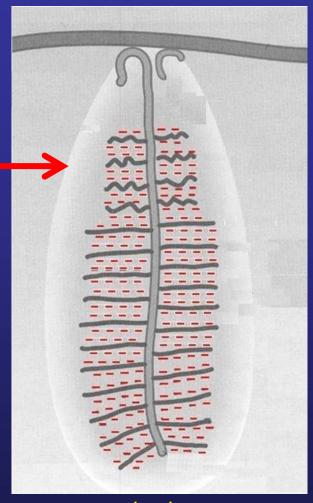




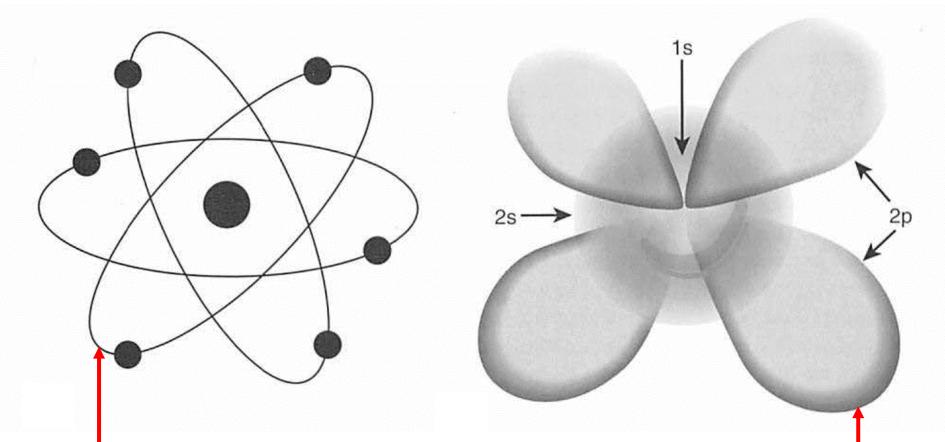
collagen triple helix: a hydrated semiconductor



connective tissue: a composite material

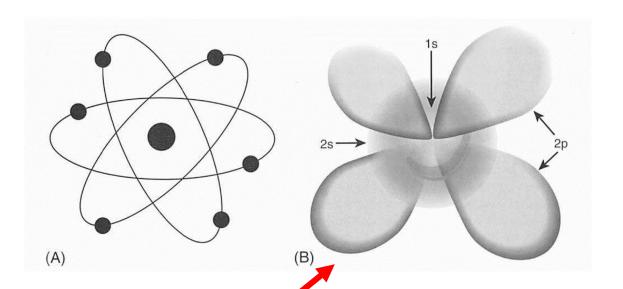


ground substance: an electron reservoir

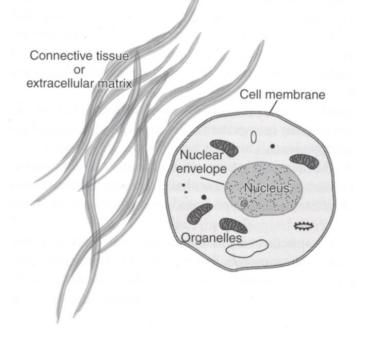


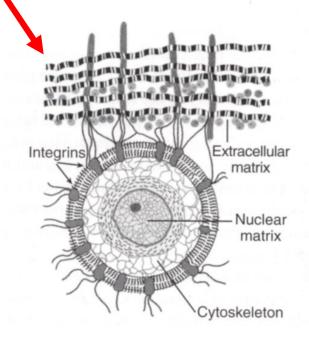
Left, old orbital view of the atom. Right modern view of the atom:

Orbits have been replaced with orbitals.

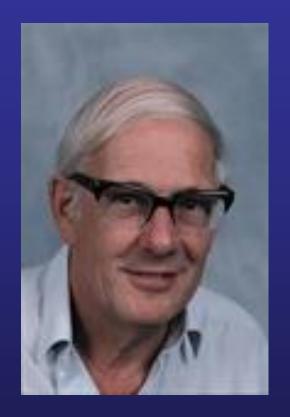


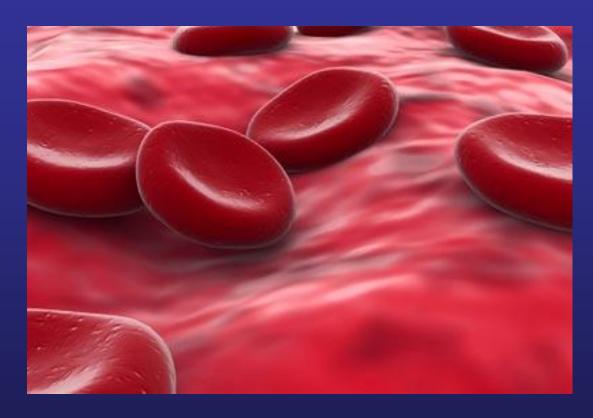
When you visualize atoms or cells, use these images.





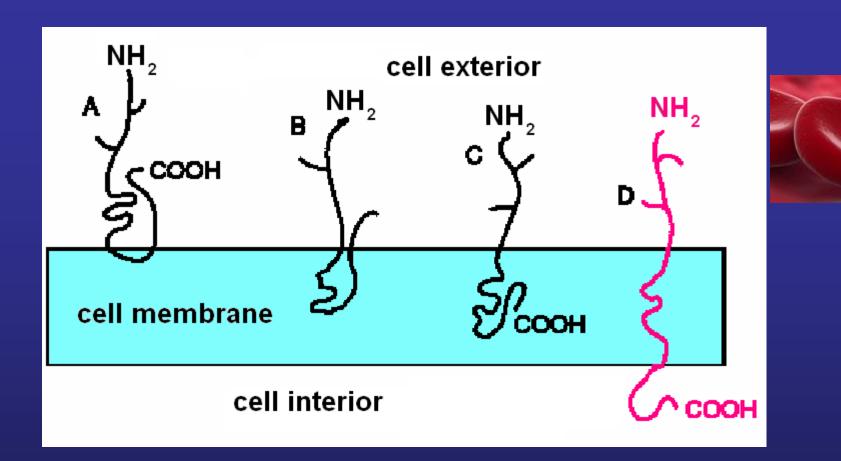
# A profound discovery by Mark Bretscher





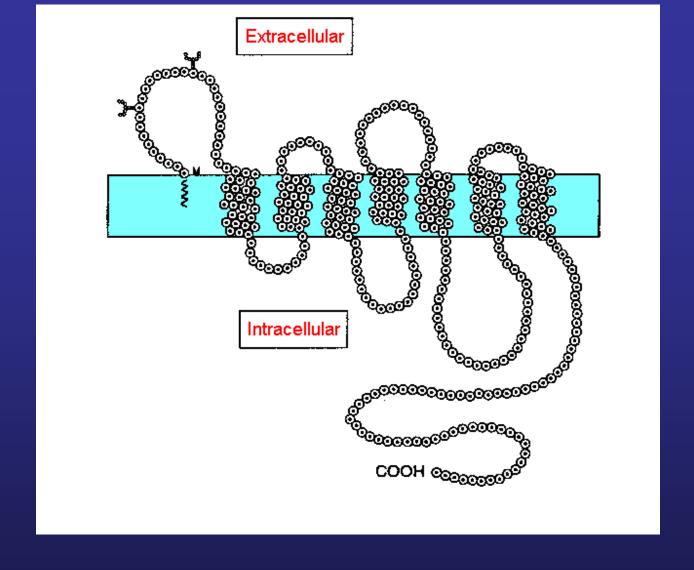
Medical Research Council
Laboratory of Molecular Biology
Hills Road
Cambridge CB2 2QH, UK

Red blood cells

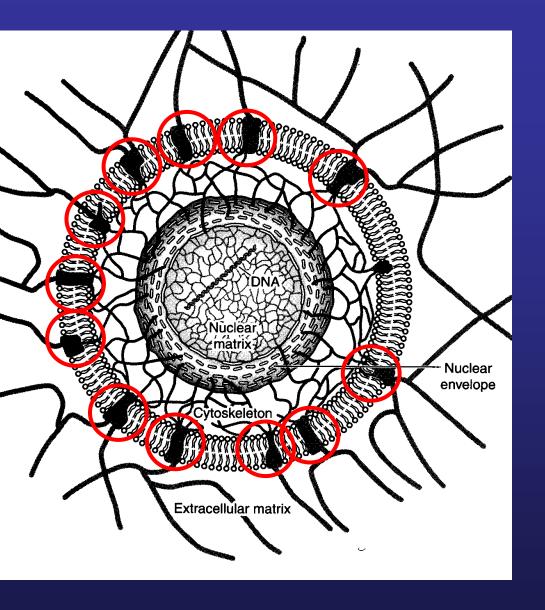


A major protein which spans the human erythrocyte membrane. J. Mol. Biol., 59, 351-357 (1971).

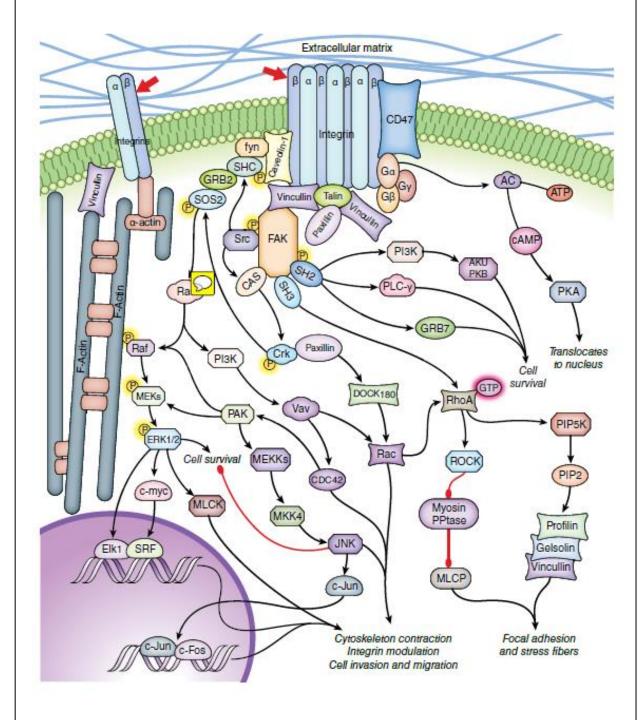
Major human erythrocyte glycoprotein spans the cell membrane. Nature New Biology, 231, 229-232 (1971).



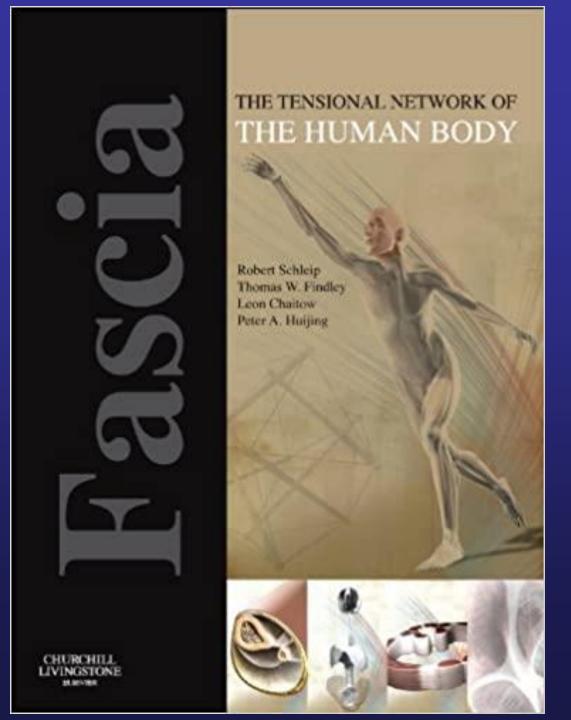
It was soon discovered that Bretscher was right, many cells have proteins extending from one side to another. This protein crosses the membrane 7 times.



Important molecules called integrins link the cellular matrix with the extra-cellular matrix and with all of the connective tissues. The extracellular matrix is "hard-wired" to the cytoskeleton and nuclear matrix. The links are both mechanical and energetic.



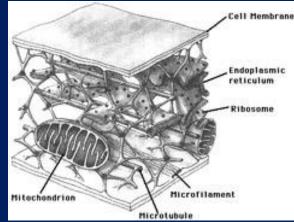
Biochemists
have
discovered an
intricate
network of
molecules
related to the
integrins.



Chapter 2.5
Fascia as a body-wide communication system.

James L Oschman

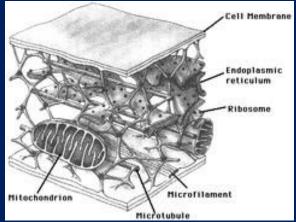




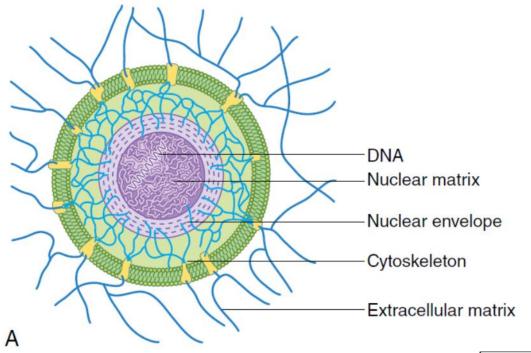
A single-celled paramecium swims gracefully, avoids predators, finds food, mates, and has sex, all without a single synapse. "Of nerve there is no trace. But the cell framework, the cytoskeleton might serve."

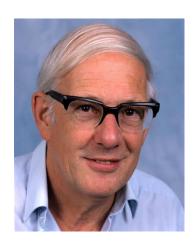
~Sherrington, 1951



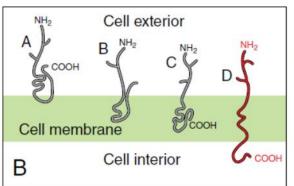


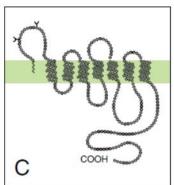
When we think of communication in the human body, we usually first think of nerves and synapses. The purpose of the Sherrington quotation is to remind us of the existence of evolutionarily ancient communication systems that are present in single celled organisms that are entirely lacking in nerves or synapses.

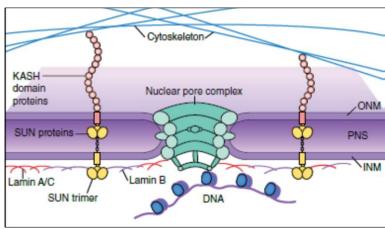


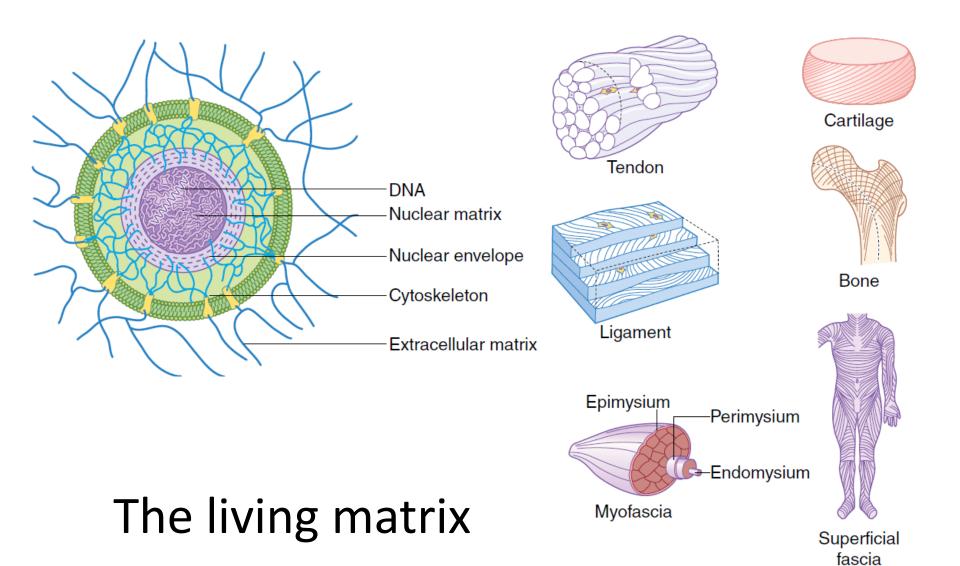


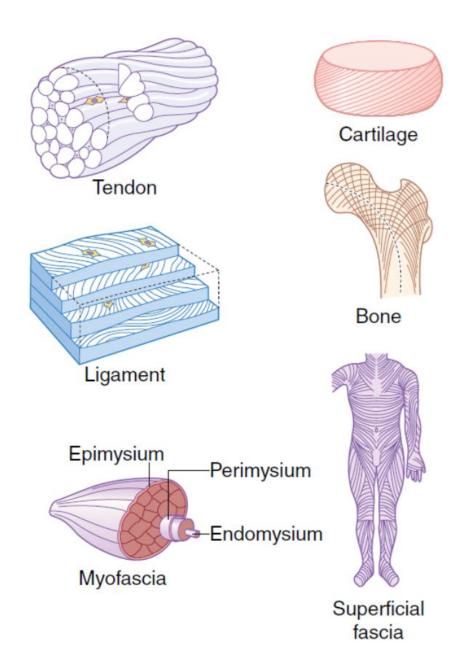
Integrins – Mark Bretscher





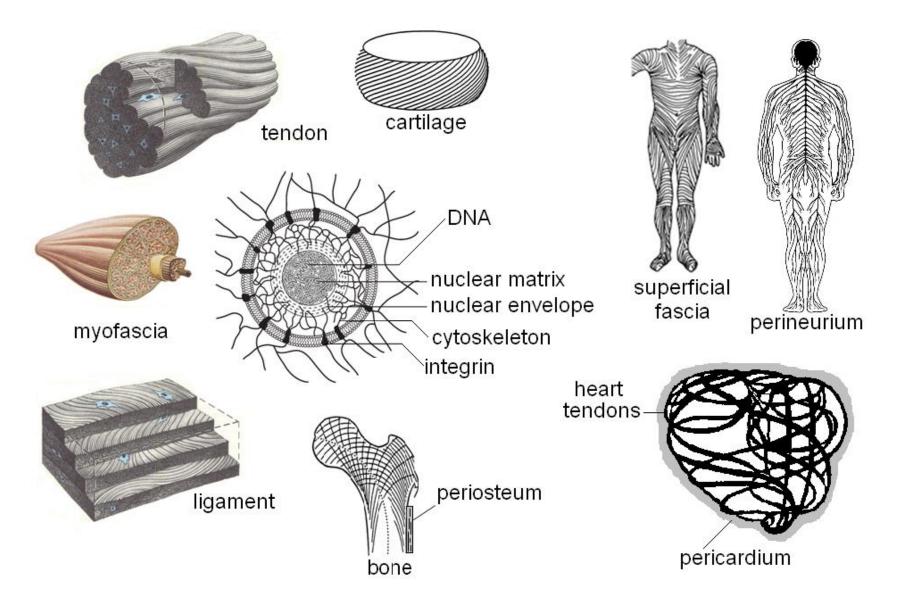


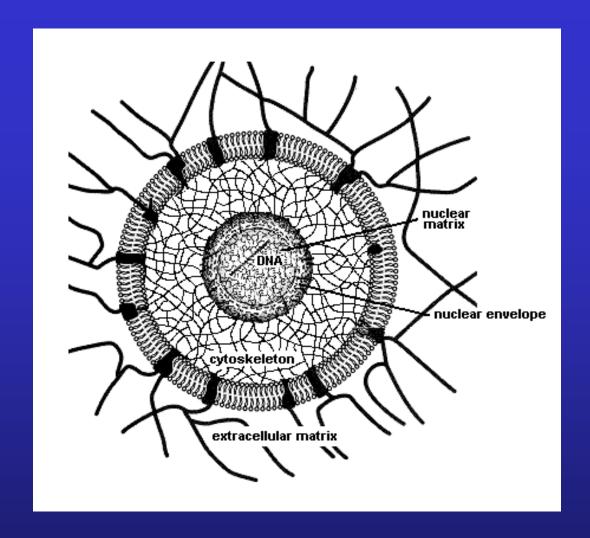




Fascia –
the only system
in the body that
touches all of
the other
systems.

### We call the whole system the living matrix.

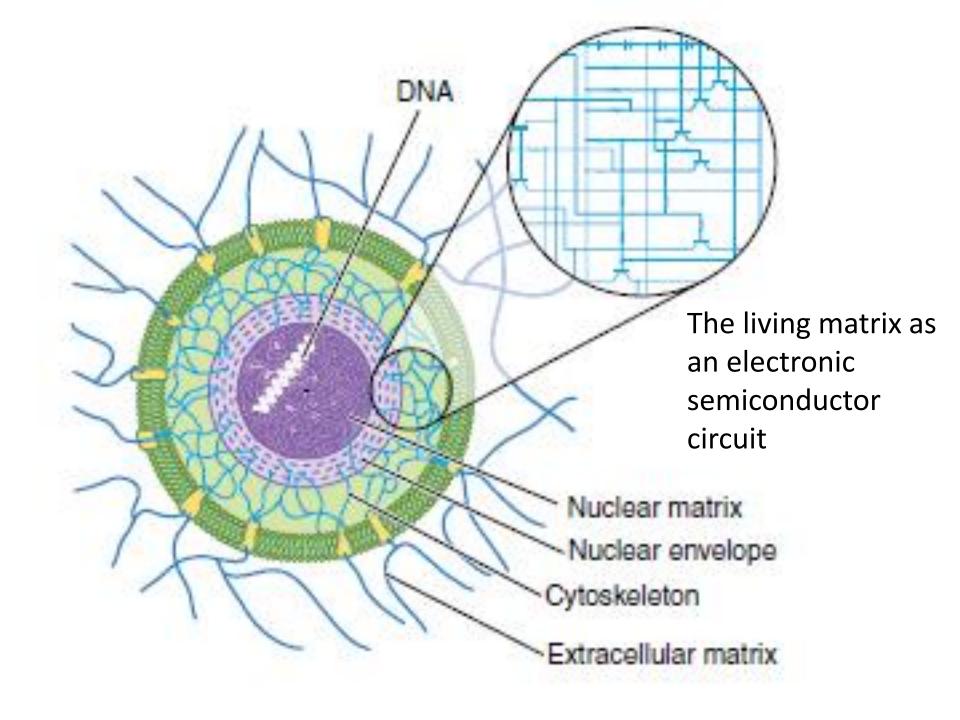




## The Living Matrix

"No matter what your modality may be, you cannot interact with a body without engaging the living matrix. It is simply everywhere."

~Deane Juhan



68th Annual Conference on Light and Vision St. Louis, MO May 1, 2000

#### In Memoriam

Dr. John Searfoss

January 3, 1949 - May 10, 2000



Dr. John Searfoss (left) receiving the 2000 Spitler Award From Dr. Charlie Butts (right) with the following inscription;

"Presented to John Searfoss for original and important contributions in Instrumentation, Methodology, Research, and Teaching in Phototherapy."

A memorial fund has been established. Contact Viktor Kuraitis Ph. 905-935-1440 Fx: 905-938-2249

#### EXPLORING THE BIOLOGY

#### OF

#### PHOTOTHERAPY

#### By James L. Oschman, Ph.D.

This essay is affectionately dedicated to the memory of John Searfoss, O.D., a distinguished pioneer in phototherapy and a very warm and enthusiastic colleague.

There exists a relationship which is largely predictable between light frequency, environment, and the restoration of health following departures from normal, which are still within the physiologic limits....

H.R. Spitler, M.D., O.D.

Dr. Spitler's observation that, within limits, health can be restored with specific light frequencies, poses a profound biological question: How can light "jump start" the healing process for a wide range of clinical problems, involving tissues throughout the body? An answer to this question would obviously have much medical significance.

Gottlieb, discussing the research of Tiina Karu in Russia, states the problem this way:

How does light find the right places to work to heal the body? Normal tissue is much less affected by light than out-ofbalance tissue. Starving cells are far more sensitive than well-fed

Recent research is beginning to answer this question. This essay summarizes relevant discoveries and then follows a light stimulus through the network within the body to the places where structure and function have been compromised. The goal is a logical explanation of how the appropriate application of light can reach and benefit any part and any process in the organism.

#### UNSOLVED PROBLEMS

Modern biomedical research has achieved many milestones, and given us crisp images of our internal structure and physiology. In spite of this, a number of important theoretical and clinical problems remain virtually untouched. Our academic struggles and our intellectual myopias stem from our basic approach, which is to take the organism to pieces and study the parts, one-by-one. While much has been learned this way, there is a tendency to lose sight of the big picture. There is a tendency to focus on phenomena that are easy to study or measure, leaving more difficult areas unexplored. And textbook explanations are often taken as complete answers, even though they are not.

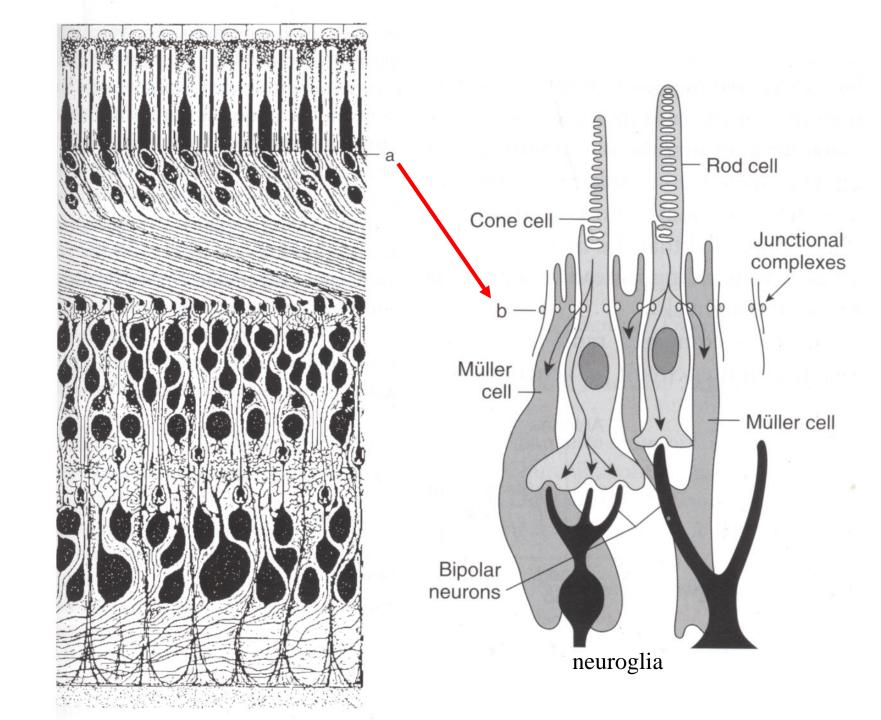
Research on consciousness is a good model for discussing wholesystem inquiries such as ours. because simplistic and reductionistic hypotheses have only led to limited progress. Models of consciousness are also of interest to phototherapists who observe beneficial behavioral or psychological changes in their clients. Of key importance is the realization that what we have referred to as mind and body are one and the same, indistinguishable, inseparable, intertwined. The idea that mind and body are connected is erroneous and misleading. It is impossible to

connect something to itself. While we might agree on this point, it is only recently that we have begun to understand its real significance.

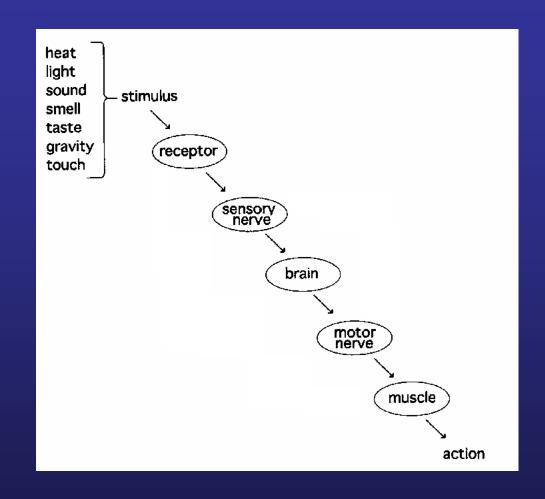
In terms of phototherapies, the eye is obviously the window to the brain. It has therefore seemed logical to focus on neurophysiological models as a basis for phototherapy. But the nervous system actually plays only minor roles in injury repair and defense against disease. The real actors are cells and the medium in which they reside, the connective tissues.

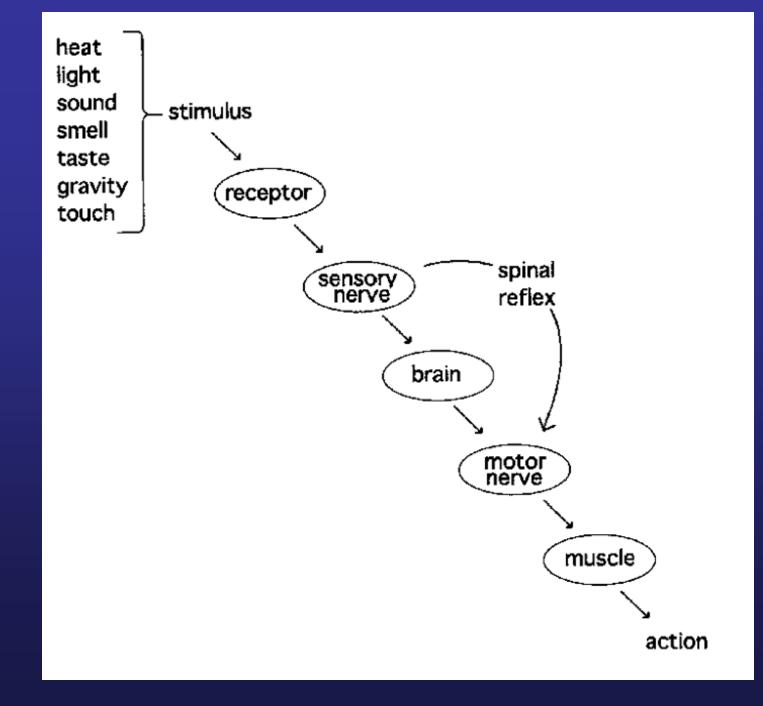
Our obsession with the brain and neurons has been addressed brilliantly and concisely in a recent paper by Stuart Hameroff: The neuron doctrine is an insult to neurons.<sup>2</sup>

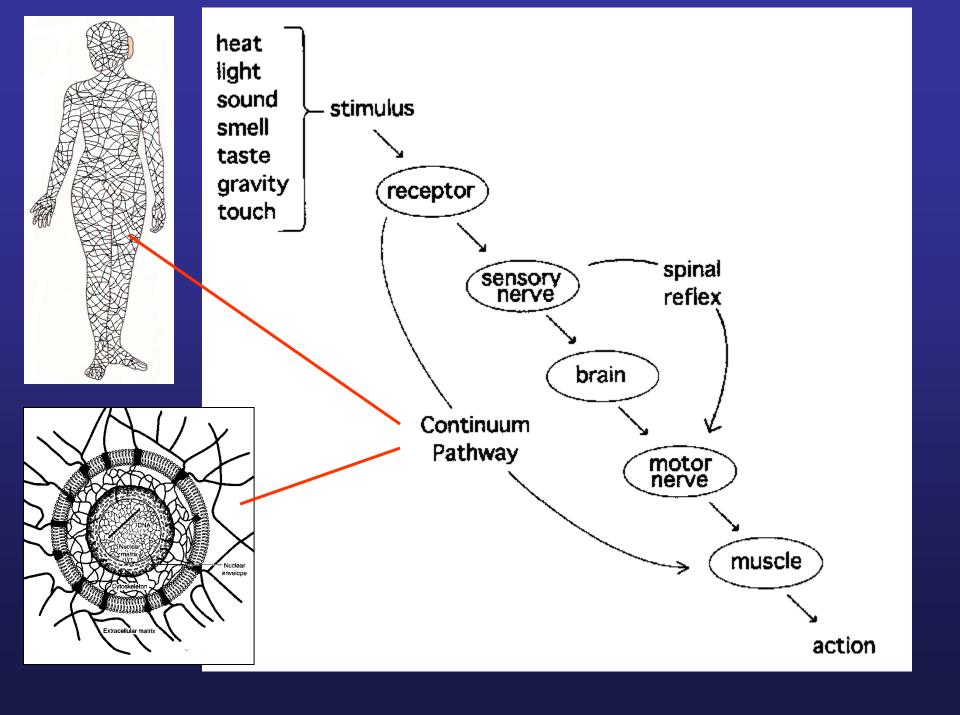
The neuron doctrine, currently in vogue, is based on the assumption that brain = mind = computer. This view leaves us almost completely ignorant about how the brain produces mental life. expectation is that consciousness emerges at some critical level of computational complexity in the self-organizing networks of synaptically connected neurons. However, there are no testable predictions arising from such an emergence model. We can only wait for consciousness to happen.



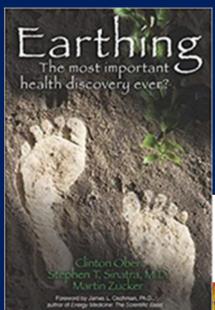
Our entire perception of the world, and our reaction to that world completely depend on our ability to sense and utilize the energies within and around us.







# Demonstration of electron mobility in the body: Earthing or Grounding

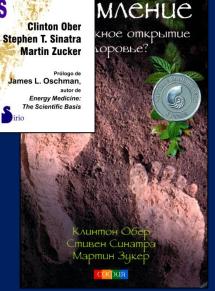


The Earthing book has been translated into a dozen languages. Millions of people around the world now know about earthing. Their feedback has been incredible.





el descubrimiento más importante de todos los tiempos sobre la salud



Aches & Pains

Allergies

Acne

Arthritis Asthma

Atrial Fibrillation

Autism

Autoimmune Disease

Backache Burns

**Babies** Preemies

Groggy Child Bursitis

Cardiovascular Diseases

Cellulite

Chronic Fatigue

Colic COPD

Depression

Electomagnetic Sensitivity

Eye Strain Hair Growth Headaches

Heart Failure

High Blood Pressure

Hospital Stay Indigestion /IBS/ Injury Repair Insomnia

Jet-Lag Knee Pain Leg Spasms

Lyme Disease

lyme Disease Meditation

Menopause / Hot Flashes Flashes

Migraines Mood

Multiple Sclerosis Panic Attacks

Parkinson's Disease

Pets

Pets' Fears Plantar Fasciitis

PTSD Pregnancy **PVCs** 

Prostate Enlargement Prothesis Arthritis

Psoriasis

Repetitive Strain Injury Restless Leg Syndrome Rheumatoid Arthritis Seizures/Convulsions

Sex

Skeptical?

Sleep Apnia / Snoring

Spinal Issues

Stress Surgery Tattoos Teeth

Thyroid Problems

Tinnitus

Vaicose Veins

Vertigo Weight Loss

**SUMMARY** OF FEEDBACK: conditions that are relieved by Earthing.

## Award-wining documentary:

Watch on YouTube:

http://bit.ly/EarthingMovieYouTube

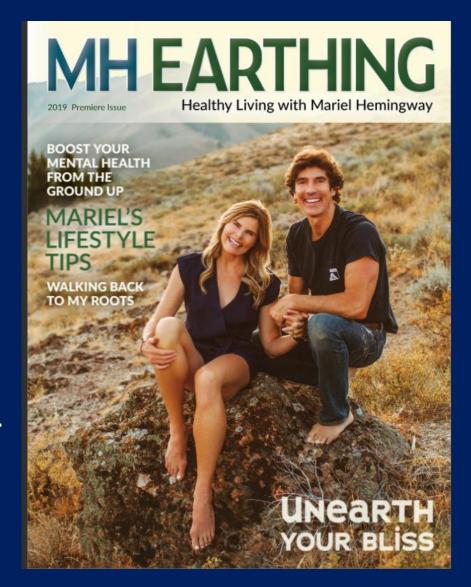
Or

Watch on Vimeo:

http://bit.ly/EarthingMovieVimeo

## A magazine:

https://indd.adobe.co m/view/20df926a-746d-4466-b21e-7536b7e29598





## Update on grounding or earthing:



Dr. Paul Ridker and colleagues at Harvard Medical School reported that a sensitive marker for inflammation, known as Hs-CRP, is a risk factor for cardiovascular disease, the number one killer world-wide.

Scientists all over the world measured CRP in relation to many different chronic diseases. It was soon discovered that inflammation is the cause of virtually every chronic health condition.

Lack of earthing may result in a deficiency disease.

## Our Covid-19 Story



### International Journal of Clinical Endocrinology and Metabolism

**Short Communication** 

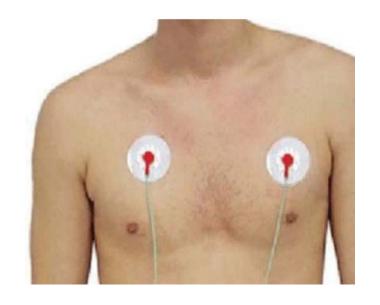
### Prevention and/or recovery from corona virus infections

Clinton Ober and James L Oschman\*

Earthing Institute and Nature's Own Research Association, USA

Published: 03 August 2020

This article describes a novel intervention that is extremely easy and science-based: Earthing or electrically grounding your body to the Earth.



Fast relief from severe respiratory distress simply by placing grounding patches over each lung. Wires plug into ground port of the electrical system.

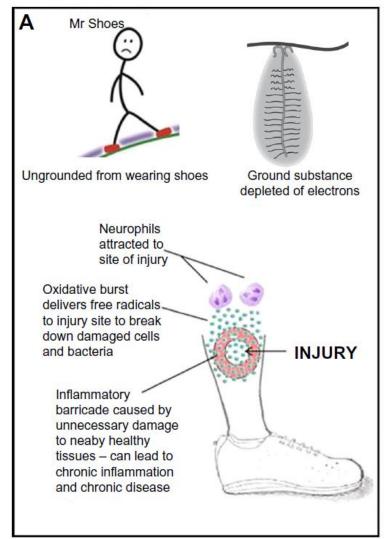
Our article was based on the observation that earthing is very effective for other respiratory ailments such as asthma and Chronic Obstructive Pulmonary Disease (COPD):

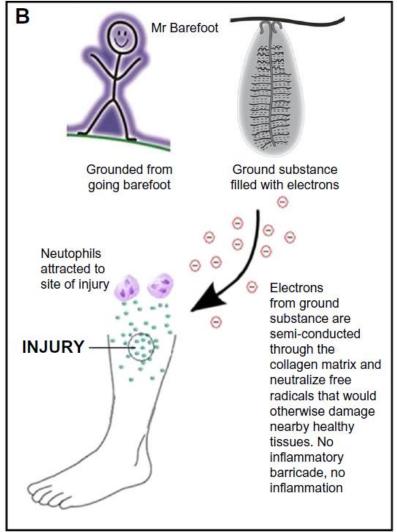


HYPOTHESIS

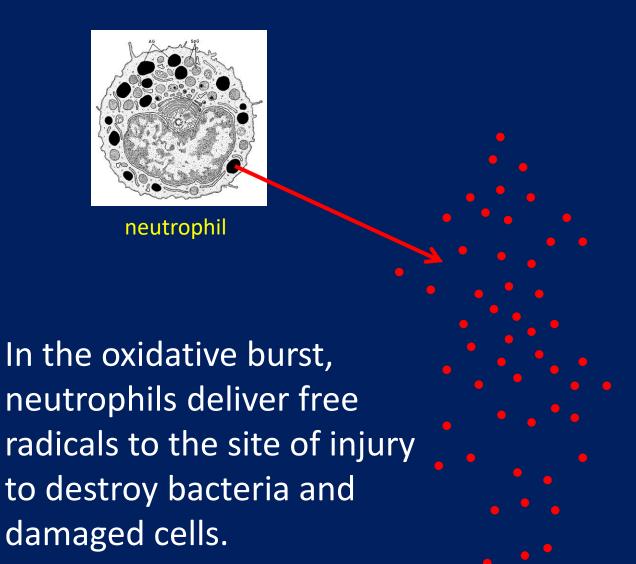
The effects of grounding (earthing) on inflammation, the immune response, wound healing, and prevention and treatment of chronic inflammatory and autoimmune diseases

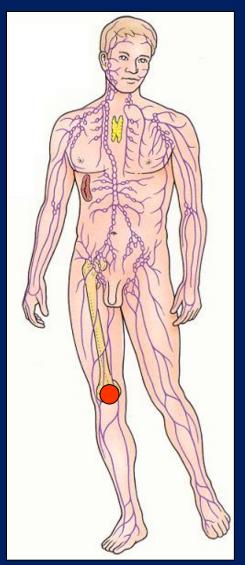
James L Oschman Gaétan Chevalier Richard Brown



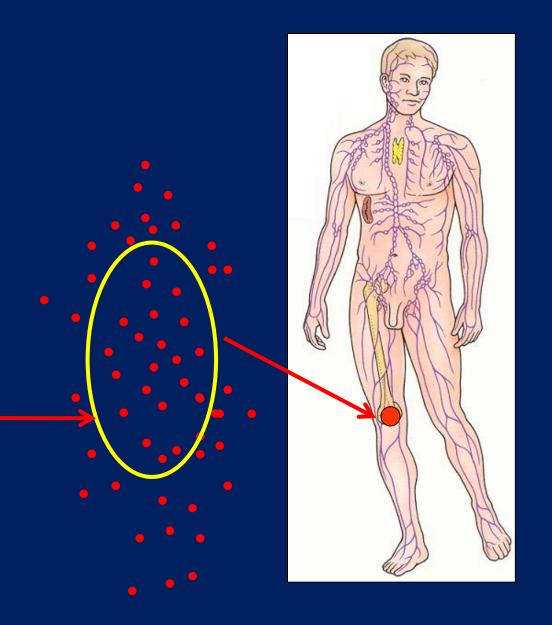


A. Mr. Shoes has a different response to injury because his electron stores are empty. Free radicals leak into surrounding healthy tissue creating collateral damage which coagulates into an inflammatory barricade. B. Mr. Barefoot has abundant electrons which neutralize free radicals before they can produce collateral damage.

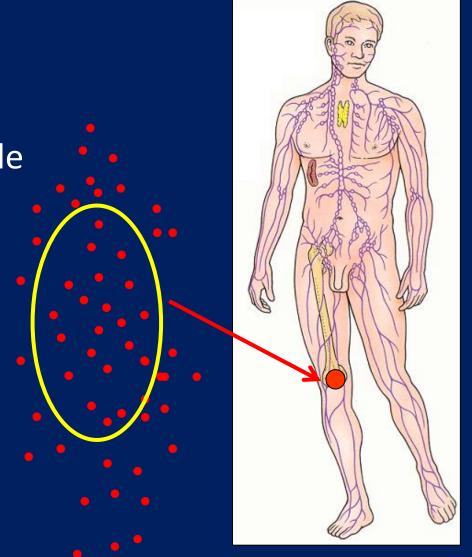


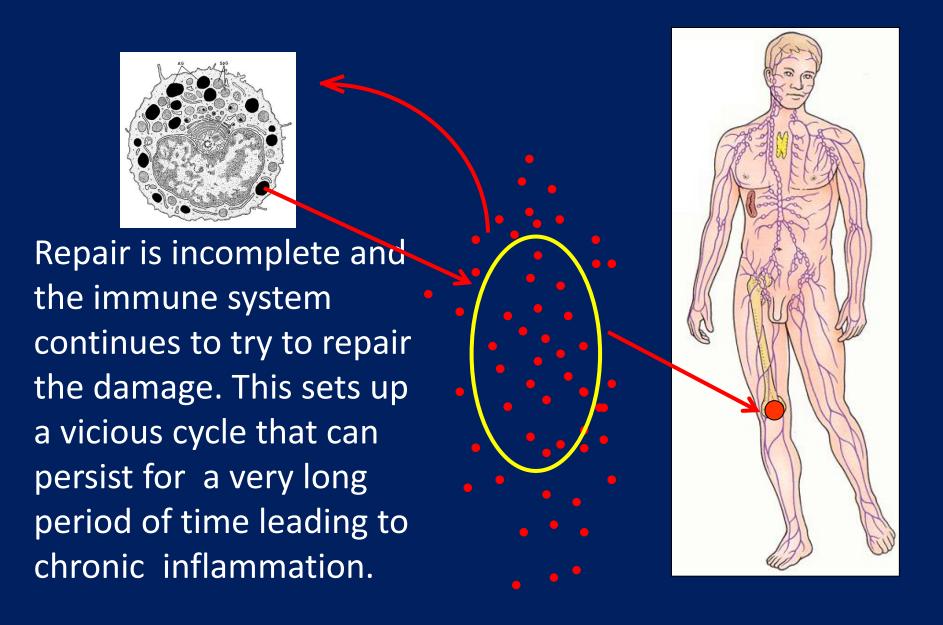


Some of the free radicals attack the surrounding tissues and damage healthy cells. The resulting debris coagulates to form an inflammatory barricade.



The inflammatory barricade blocks antioxidants and regenerative cells from entering the repair field.



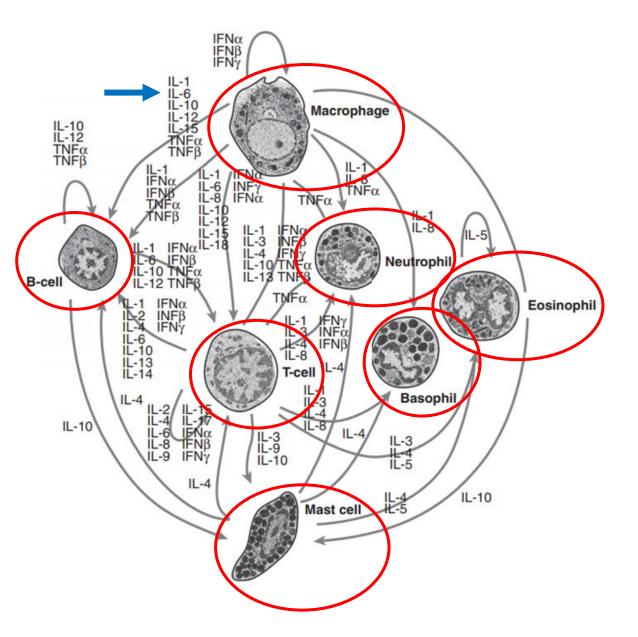


Earthing or grounding prevents this vicious cycle by confining the free radicals to places where they are needed.

Inflammatory barricade does not form!

# This has enormous significance for the Covid-19 pandemic:

Some COVID-19 patients develop dangerous acute respiratory distress syndrome (ARDS). This is triggered by a cytokine storm. The cytokines are a host of molecules that regulate the immune system as it carries out the diverse protective and defensive processes that are essential to life.



This is the cytokine network that regulates the various cells of the immune system (circled). 100 different molecules fine-tune the response to infections. Covid research has focused on IL-6 (blue arrow) which is an amplifier, creating a chaotic cytokine storm that leads to excessive inflammation.

#### December 2021:

Prevention and treatment of COVID-19 infection by earthing.

Haider Abdul-Lateef Mousa MB ChB, MSc, Assistant professor University of Basrah, College of Medicine, Iraq.



Professor Haider
Abdul-Lateef Mousa

#### Available from:

https://www.researchgate.net/publication/346734751\_Prevention\_and\_treatment\_of\_COVID-19\_infection\_by\_earthing [accessed Mar 07 2021].



University of Basrah, College of Medicine, Basrah, Iraq.

# 59 cases with COVID-19 infection, earthing about 15 min-3 hours/day

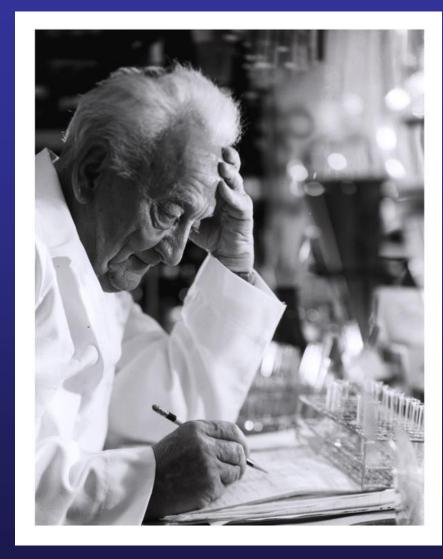
Spectacular response in a severely ill patient who was unable to speak due to labored breathing with blood oxygen level 38% on continuous oxygen supply. On the second day of three hours daily earthing, his oxygen level raised to 95% with oxygen supply and 77% without oxygen supply. After 1-3 days of earthing, most patients revealed improvement of the following symptoms: fever, dyspnea, cough, weakness, headache, chest pain, taste and smell sense loss, anorexia, and body pain.

Six people were in contact with COVID-19 patients that had performed preventive earthing. They contracted mild or shortlived illness although their households were severely affected.

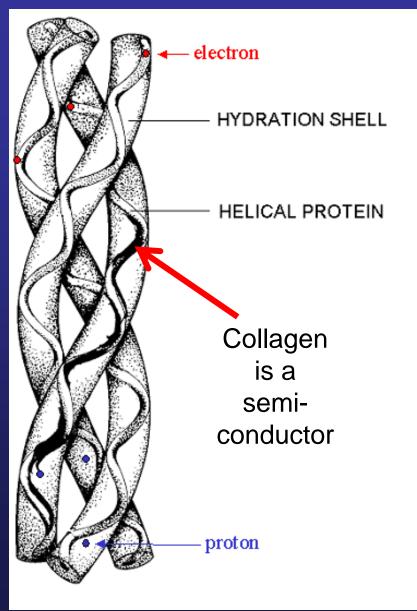
The Iraq study (December 2020) confirmed the ability of earthing to prevent and mitigate the symptoms of Covid-19 as suggested by Ober and Oschman (August 2020).

### The latest news about water:

### Szent-Györgyi's legacy:



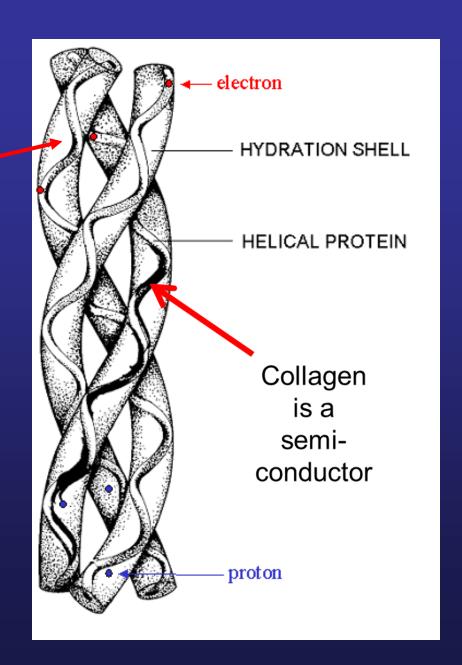
Albert Szent-Györgyi

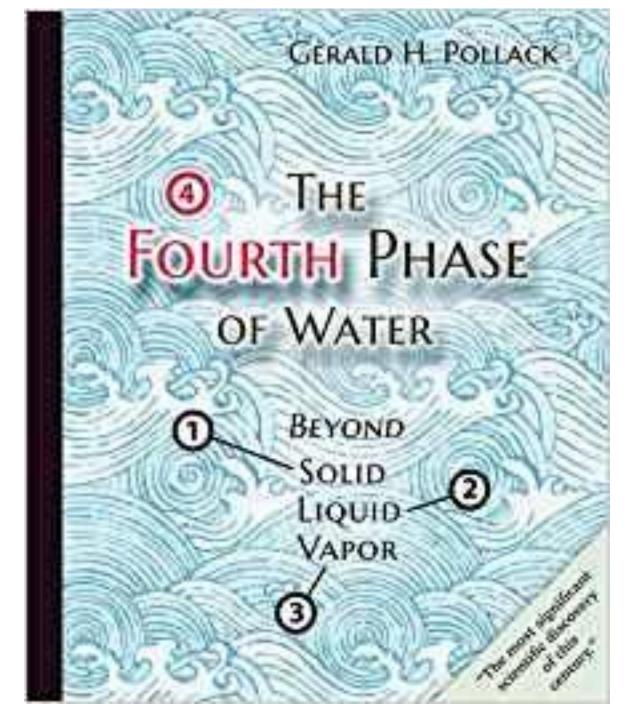


HYDRATION SHELL INTERFACIAL WATER EXCLUSION ZONE WATER

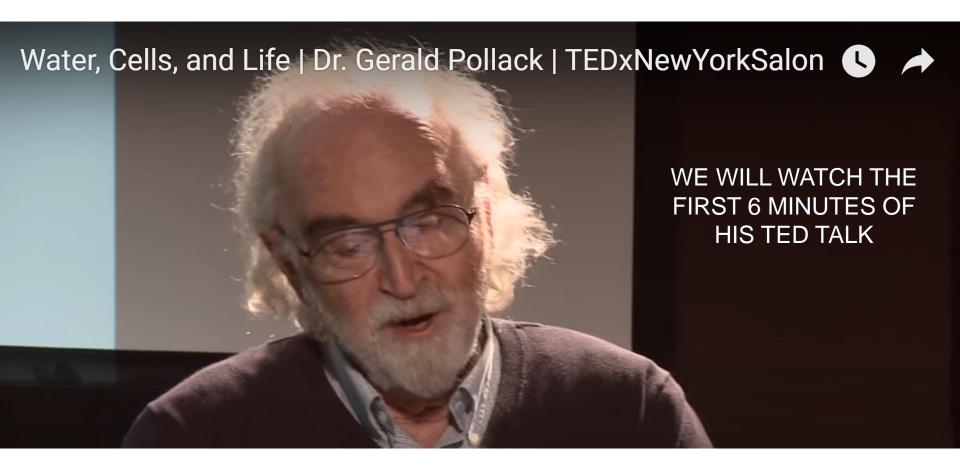
A FOURTH PHASE OF WATER:

SOLID
LIQUID
GAS
EXCLUSION ZONE





### Gerald Pollack



https://www.youtube.com/watch?v=p9UC0chfXcg

# Another mystery solved by the fourth state of water:

How does the venous blood get from the feet up to the heart?

## One-Way Vein Valves Blood flowing to Healthy valve prevents reverse blood flow heart

### Conventional explanation:

One-way valves in the legs – when leg muscles contract, veins are squeezed, forcing blood upward. Valves prevent downward flow.

# A problem raised by Rudolph Steiner in 1920:

The heart is not a pump.

# THE HEART IS NOT A PUMP: A REFUTATION OF THE PRESSURE PROPULSION PREMISE OF HEART FUNCTION

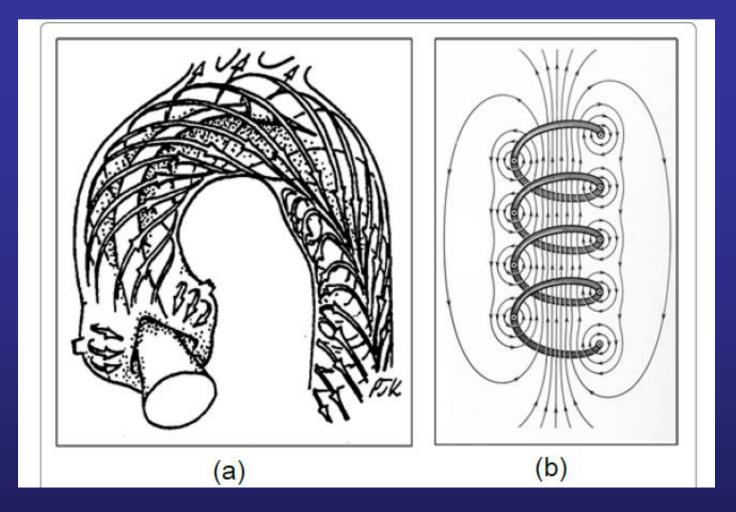
Ralph Marinelli; Branko Fuerst; Hoyte van der Zee; Andrew McGinn; William Marinelli

Rudolf Steiner Research Center, Royal Oak, MI
Dept. of Anesthesiology, Albany Medical College, Albany, NY
Dept. of Anesthesiology and Physiology, Albany Medical College, NY
Cardiovascular Consultants Ltd., Minneapolis, MN. Department of
Medicine, University of Minnesota, MN
Hennipen County Medical Center and Dept. of Medicine, University of
Minnesota, MN

http://www.rsarchive.org/RelArtic/Marinelli/index.html

In 1920, Rudolph Steiner in Switzerland pointed out in lectures to medical doctors that the heart was not a pump forcing inert blood to move with pressure, but that the blood was propelled with its own biological momentum, as can be seen in the embryo.

In 1932, Bremer of Harvard filmed the blood in the very early embryo circulating in selfpropelled mode in spiraling streams before the heart was functioning. Amazingly, he was so impressed with the spiraling nature of the blood flow pattern that he failed to realize that the phenomena before him had demolished the pressure propulsion principle.



a) Vortical flow pattern in the aortic arch. The heart electricity is thought to be conducted through the circulatory system by ions in the blood, and the conductor itself, the blood, is moving helically. b) From an electrical engineering perspective, this resembles a coil or a solenoid that amplifies the electromagnetic output.

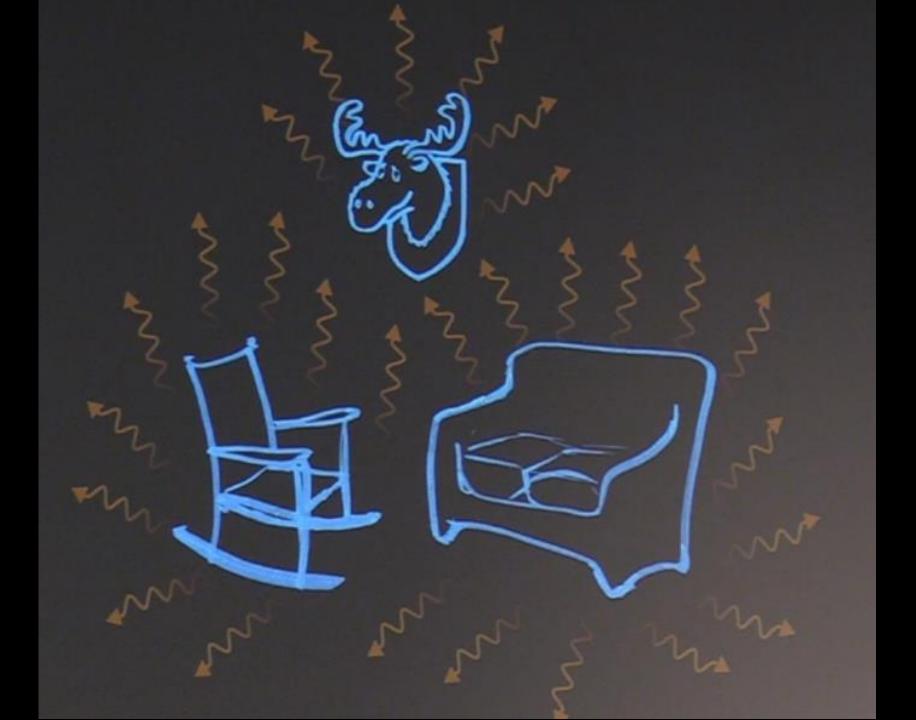
# If the heart does not pump the blood, what does?

Answer:
Light pumps the blood!

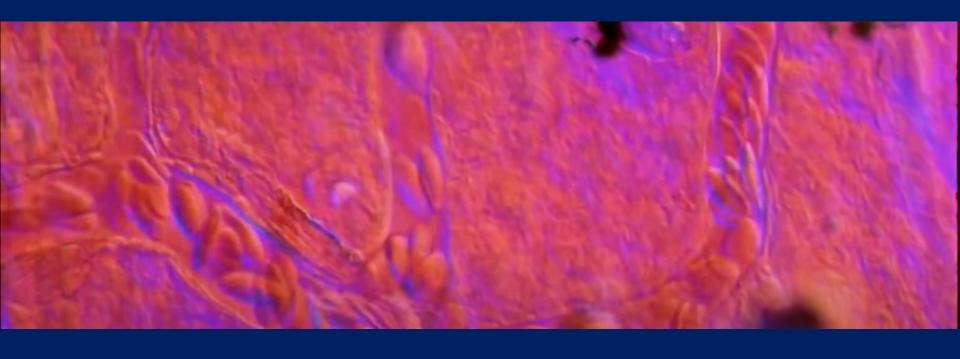
## Light can drive flow through a hydrophilic tube.



https://www.youtube.com/watch?v=i-T7tCMUDXU&t=672s







(186) Capillary Blood Flow in Frog Web – YouTube

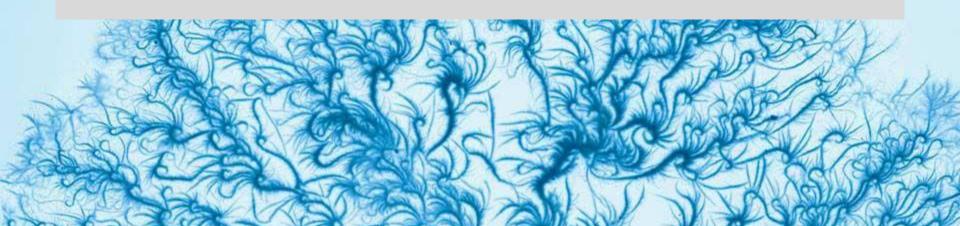
#### 2019 WATER CONFERENCE

## Water Conference 2019 on the Physics, Chemistry, and Biology of Water

Interfacial Water and the Quantum Information Field:

An Update

James L. Oschman, Ph.D Nature's Own Research Association



### Water Conference 2021

on the Physics, Chemistry, and Biology of Water

Date: October, 14th to 17th, 2021

Location: Bad Soden, Germany

**Registration Starts: May 2-2021** 

**REGISTER NOW!** 

# Update on the fabric of space:

# How do the quantum information field and morphic resonance work?

#### Summary:

Evidence from a variety of sources details the structure and properties of an all-pervasive quantum information field that stores data of all kinds and that can energize a variety of phenomena.

The quantum information field has infinite memory storage capacity and it records events anywhere instantaneously.

#### The quantum information field:

- holographic
- fractal
- tensegrous
- Phi mathematics
- E-8 symmetry

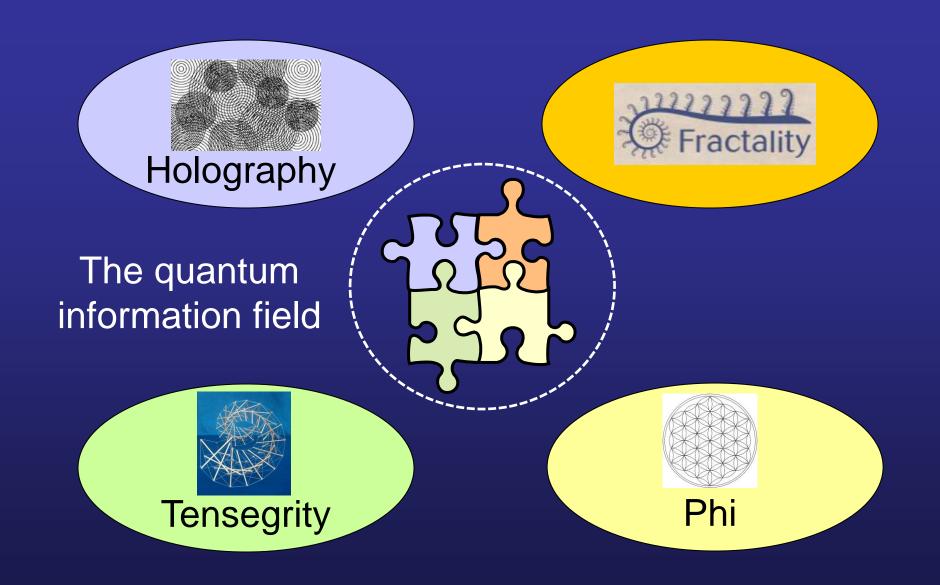
The holographic universe

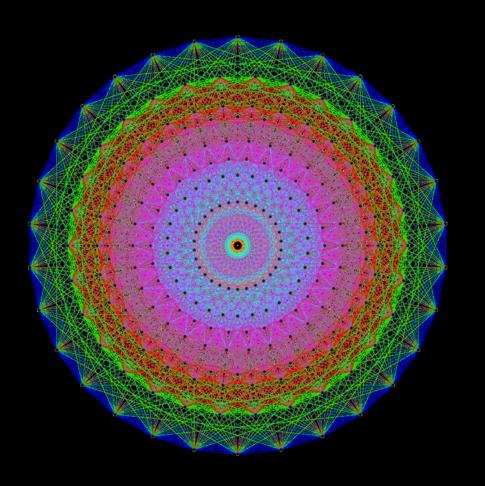
The fractal universe

A well defined quantum information field

The tensegrous fabric of space

Phi or the sacred geometry of space





### E-8 symmetry





#### Hacking reality

A layperson's guide to E8.

Is there an 8-dimensional "engine" behind our universe? Join Marion Kerr on a fun, visually exciting journey as she explores a mysterious, highly complex structure known simply as 'E8'—a weird, 8-dimensional mathematical object that for some, strange reason, appears to encode all of the particles and forces of our 3-dimensional universe.

#### Let us talk about infinity.



Imagine opening your eyes and finding yourself surrounded by water and you cannot remember ever not being in that water (space).



The first question you might ask is, "how did I get here?"



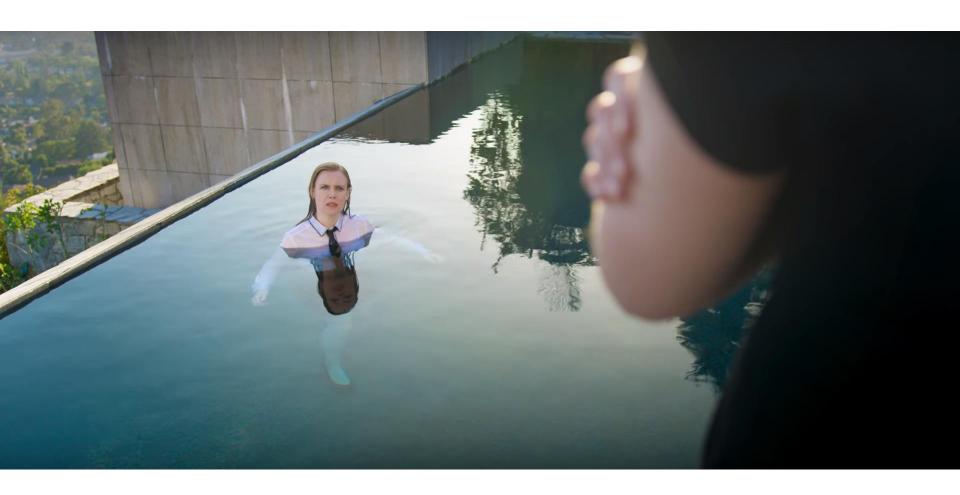
#### You've always been there.



What do you mean, always? When did I enter the pool?



## You never entered the pool. You have always been in the pool (space).



### Okay but where was I before I was in the pool? That's the first question.

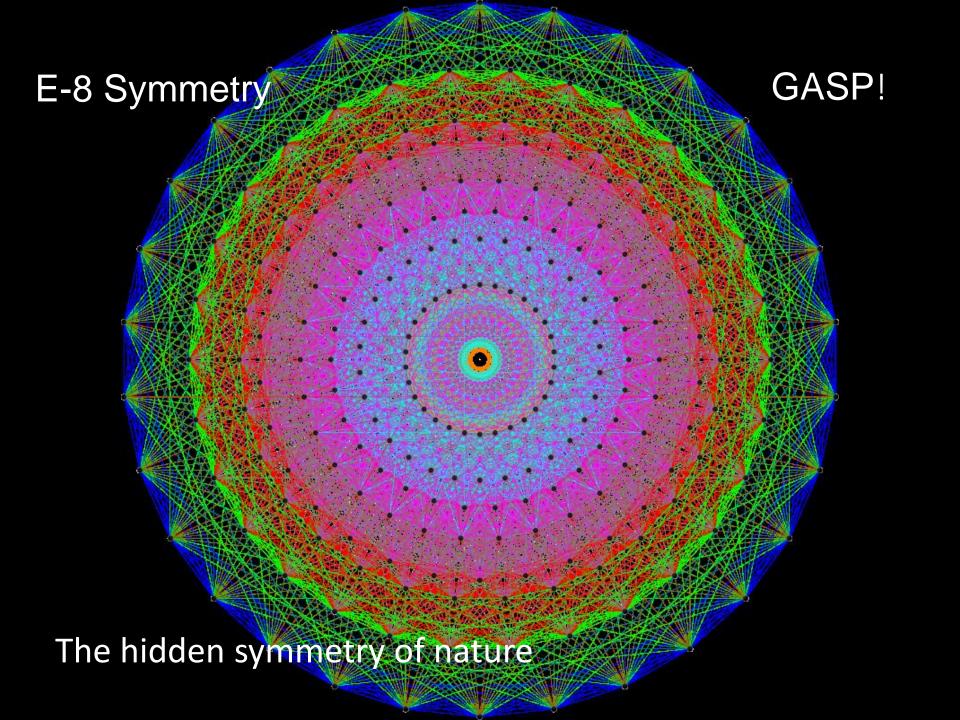


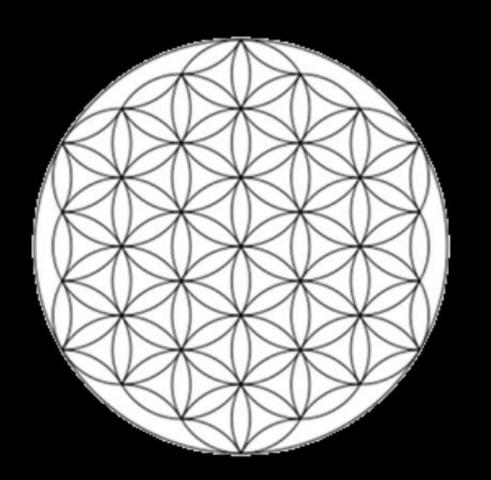
There is no before in which you were not in the pool.



#### You have always been in the pool. ALWAYS.







# Mathematics: Sacred Geometry

# Detection of gravity waves



An astrophysicist specializing in the study of black holes.

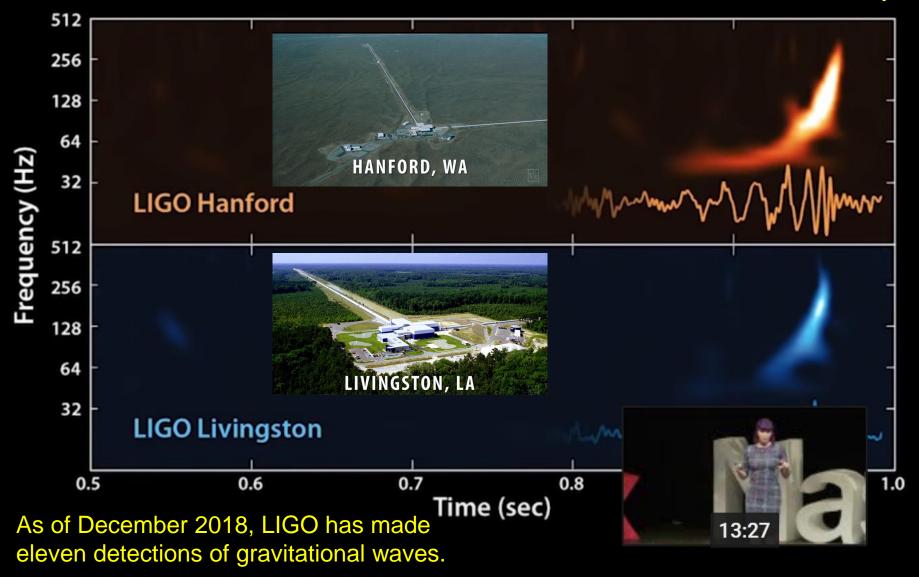
https://www.youtube.com/watch?v=DTKGAE4voNM

Presentation Copyright 2019 J.L. Oschman

# Laser Interferometer Gravitational-Wave Observatory Supported by the National Science Foundation Operated by Caltech and MIT



#### Laser Interferometer Gravitational-Wave Observatory









Presentation Copyright 2019 J.L. Oschman

Gravity waves change dimensions by one part in  $10^{21}$  which equivalent to 1/10,000 the width of a proton – the smallest measurement ever made.

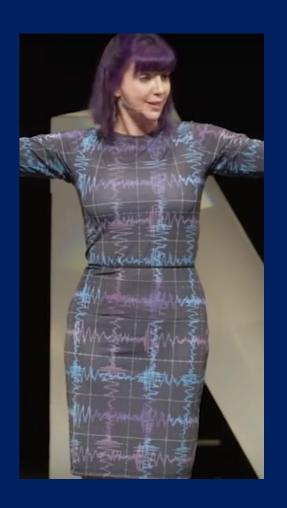
The mirrors are the smoothest ever made. They weigh 90 pounds and are suspended by silica threads that are twice the thickness of a human hair.

More accuracy is obtained by using more photons, so they use a megawatt laser. Enough energy to power 1000 homes.

Air in the arms will interfere with the beams, so they spent 40 days pumping out all of the air.

They pumped out enough air to fill 2.5 million footballs. The second best vacuum in the world. A trillionth of atmospheric pressure.

You are matter. You move. All throughout life you make gravitational waves. Every move you make, every choice you make, throughout your life, is making gravitational waves propagating away from you at the speed of light. And long after you are gone that imprint you have made in the universe will exist.

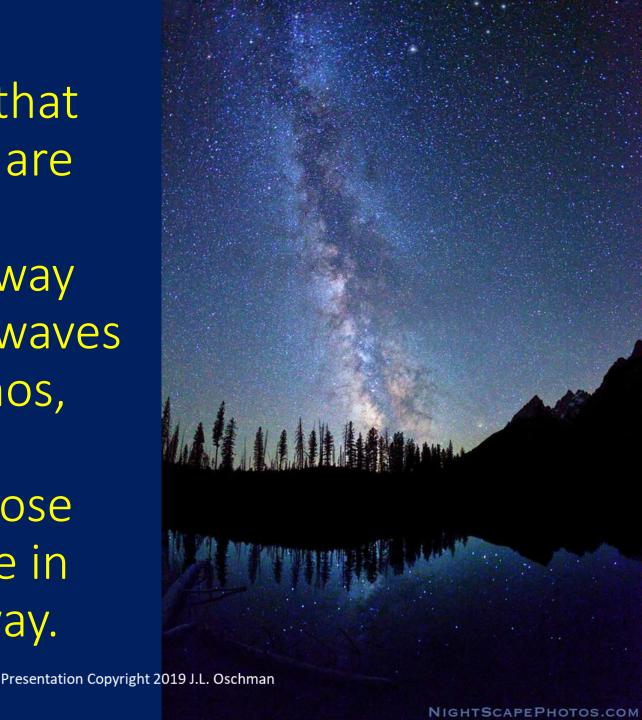


Your choices matter. They are going to be part of the universe.

Remember that your choices matter and are written in the universe.

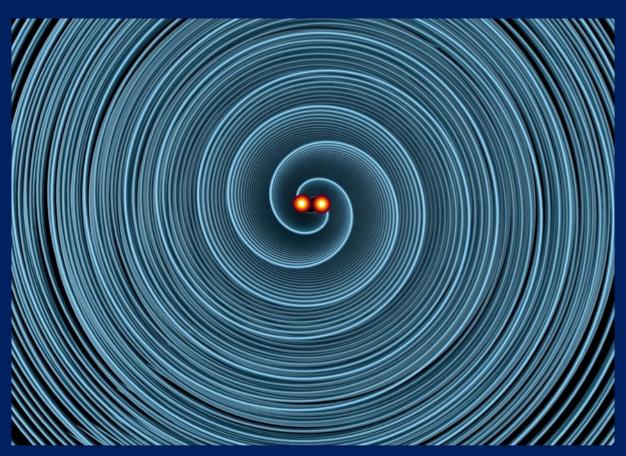
The things that we do now are going to be travelling away from us as waves in the cosmos, eventually reaching those stars we see in the milky way.

The things that we do now are going to be travelling away from us as waves in the cosmos, eventually reaching those stars we see in the milky way.



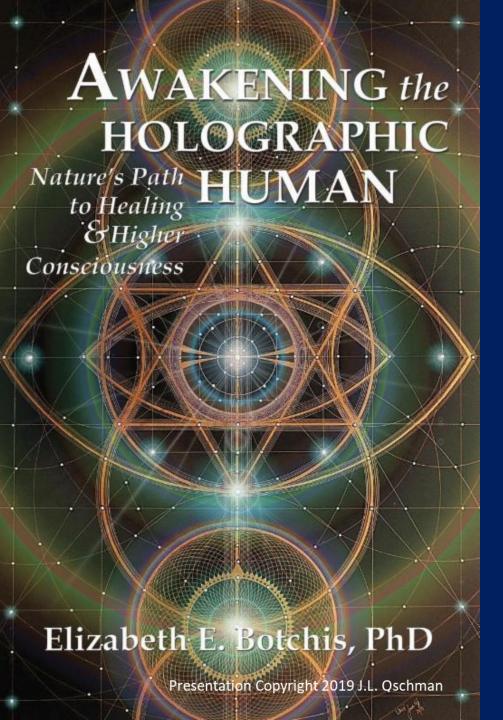
## The Universe Probably 'Remembers' Every Single Gravitational Wave

Éanna É. Flanagan, Alexander M. Grant, Abraham I. Harte, and David A. Nichols **Phys. Rev. D 99**, 084044 – Published 25 April 2019

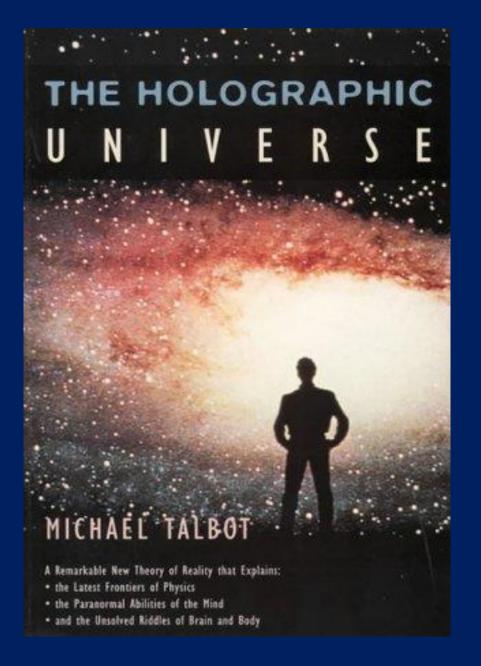


The authors showed that after the waves pass, they might leave a region slightly altered — leaving behind a sort of memory of their crossing.

The researchers termed these changes "persistent gravitational wave observables."



Many scholarly books attest to the holographic nature of mind and space.



## Ask a physicist about the structure of space and he will say one of two things:

Space has no structure!

Space does not have a structure because we do not have any equations for it.

### Or:

The vacuum is the central fundamental basis for the physical description of reality. It has become the foundation of the next era of the physical world picture.

MICROSCOPIC AND MACROSCOPIC QUANTUM VACUUM

Zeiger & Bischof 1998

## AN OVERVIEW OF TWISTOR, STRING & QUANTUM THEORY



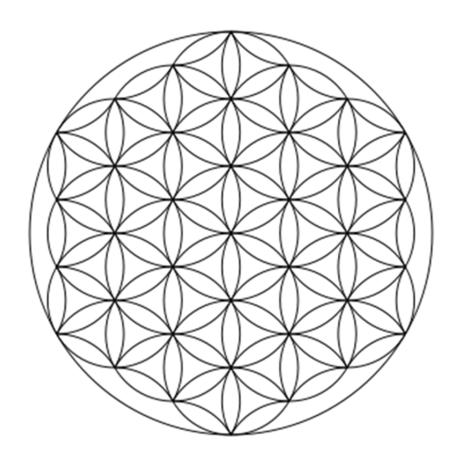
Want equations? Here they are along with readable verbal descriptions.



EDITED BY PAUL F. KISAK

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## sacred geometry geometry of the quantum vacuum



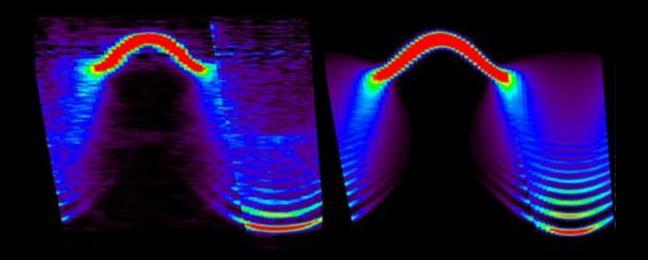
### The mathematics of space is the golden ratio or Phi:

$$a/b = (a + b)/a =$$

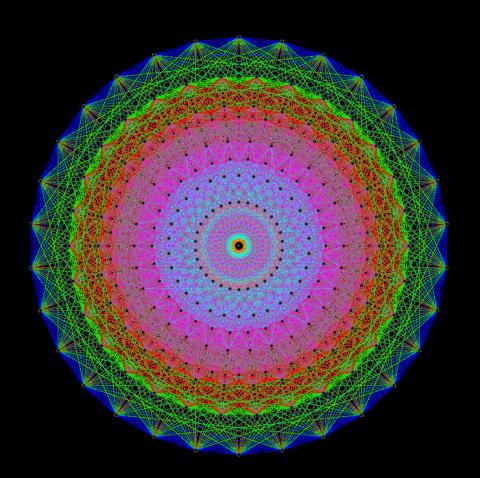
1.6180339887498948420 ...

In 2010, an international working group of leading European physicists reported the results of a decade-long study showing that solid matter has quantum properties defined by the golden ratio famous from art and architecture. The findings were published in the journal *Science*.

R. Coldea, D. A. Tennant, E. M. Wheeler, E. Wawrzynska, D. Prabhakaran, M. Telling, K. Habicht, P. Smeibidl, K. Kiefer. Quantum Criticality in an Ising Chain: Experimental Evidence for Emergent E8 Symmetry. Science, Jan. 8, 2010



To study these quantum effects the researchers focused on one atom thick chains of the magnetic material cobalt niobate, which act like quantum-scale guitar strings. Magnetism arises from the aligned spins of the magnetic atoms. The niobate "strings" were "plucked" with strong transverse magnetic fields.



For these interactions we found a series of resonant notes: The first two notes show a perfect relationship with each other. Their frequencies are in the ratio of 1.618..., which is the golden ratio famous from art and architecture. ~Dr. Radu Coldea

"It reflects a beautiful property of the quantum system — a hidden symmetry. Actually quite a special one called E8 by mathematicians, and this is its first observation in a material."

#### International Journal of Sciences

(ISSN 2305-3925)

http://www.ijSciences.com

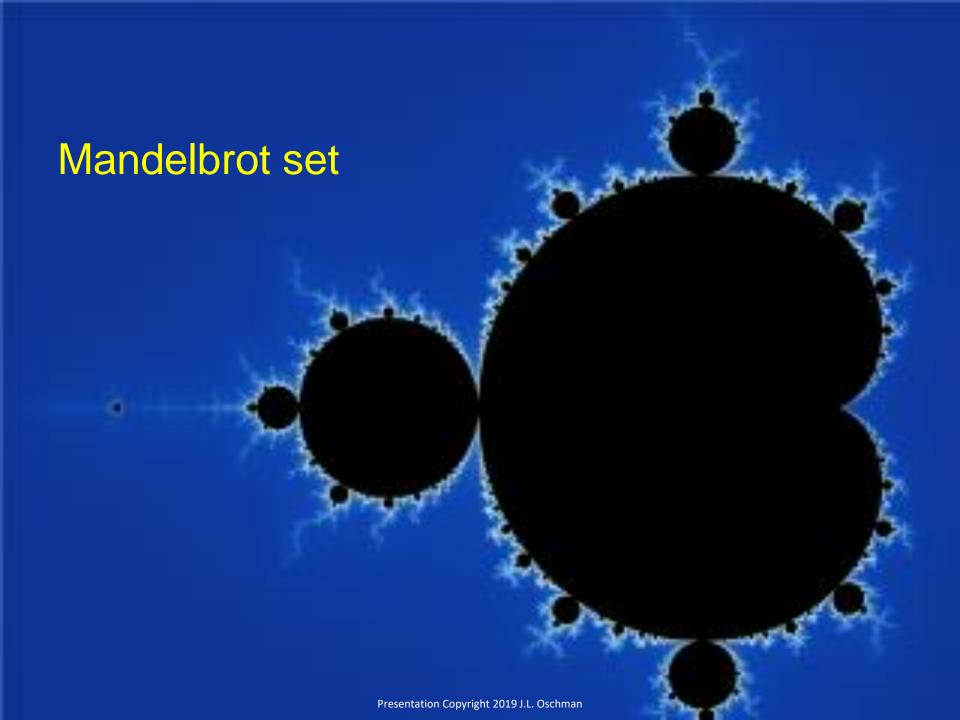
Research Article Volume 2, Issue Apr 2013

### Atomic, Ionic and Bohr Radii Linked via the Golden Ratio for Elements of Groups 1 - 8 including Lanthanides and Actinides

Raji Heyrovska<sup>1</sup>

<sup>1</sup>Na Stahlavce 6, 16000 Praha 6, Czech Republic

**Abstract:** In an earlier article, atomic radii of elements of Groups 1A - 8A were shown to be proportional to their Bohr radii obtained from the first ionization potentials and the constants of proportionality were shown to be simple functions of the Golden ratio. Here it is shown that the above finding holds also for elements of Groups 1B - 8B including Lanthanides and Actinides. All the relevant data are presented in Tables and the correlations are shown in graphs. Revised data for some of the elements of Groups 1A - 8A, have also been included.





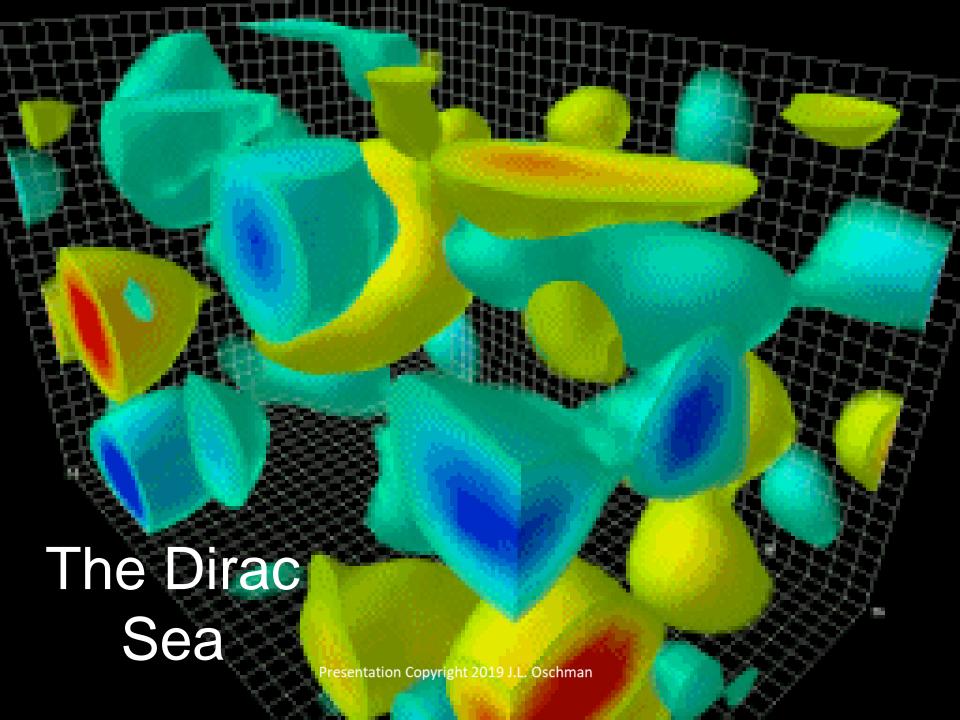
### Fractality is recursive:

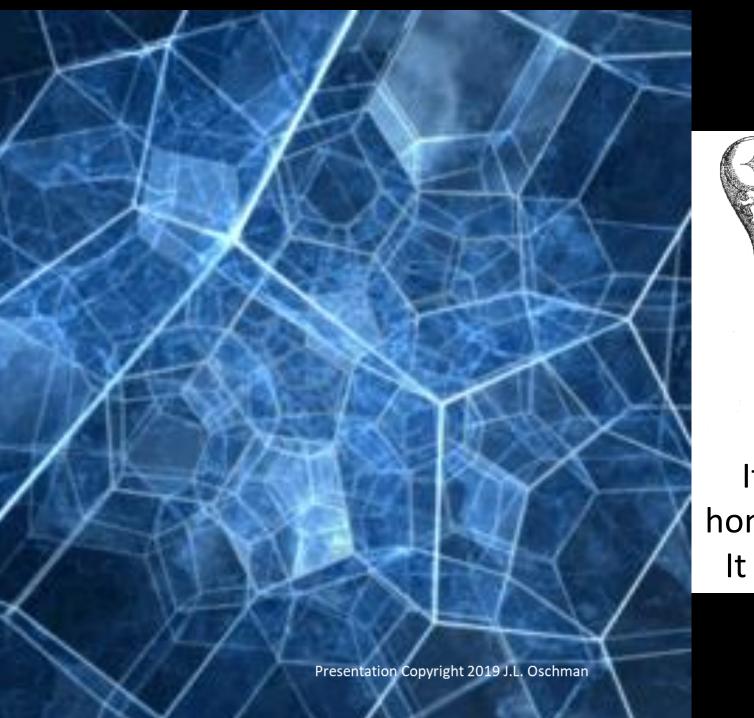
The pattern repeats in an infinite series of scales.

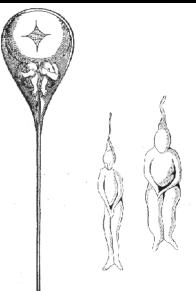
Presentation Copyright 2019 J.L. Oschman

## Some examples of the fabric:









It is not a homunculus – It is a code!

### Homeopathy

Modern quantum physics, barley 100 years old, and widely recognized as the most important discovery in the history of science, has not been satisfactorily linked to biology and medicine. Let's explore the idea that the effects of homeopathy may be explainable by quantum physics, and therefore may actually demonstrate a role of quantum physics in medicine.

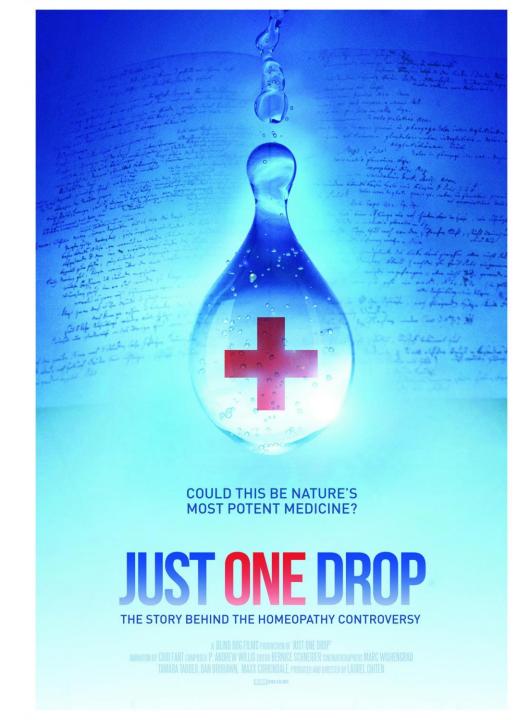
Homeopathy cures a greater percentage of cases than any other method of treatment. Homeopathy is a refined method of treating patients economically and non-violently. ~Mahatma Gandhi

Homeopathy has never cured anything, can't cure anything, and never will cure anything. ~ Australia's National Health and Medical Research Council

Just One Drop tells the little-known story of homeopathy

THE MOST
CONTROVERSIAL
SYSTEM OF MEDICINE
EVER INVENTED

https://justonedropfilm.com/





Laurel Chiten, film maker

Homeopathy cures a greater percentage of cases than any other method of treatment. Homeopathy is a refined method of treating patients economically and non-violently. ~Mahatma Gandhi

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200,000,000 people use homeopathy as their primary healthcare. Are they all crazy?

Homeopathy works on babies and animals, which are not subject to placebo effects.

In some cases, a serious illness responds immediately to a single drop of remedy.



Peter Fisher MD FRCP leader in homeopathy research



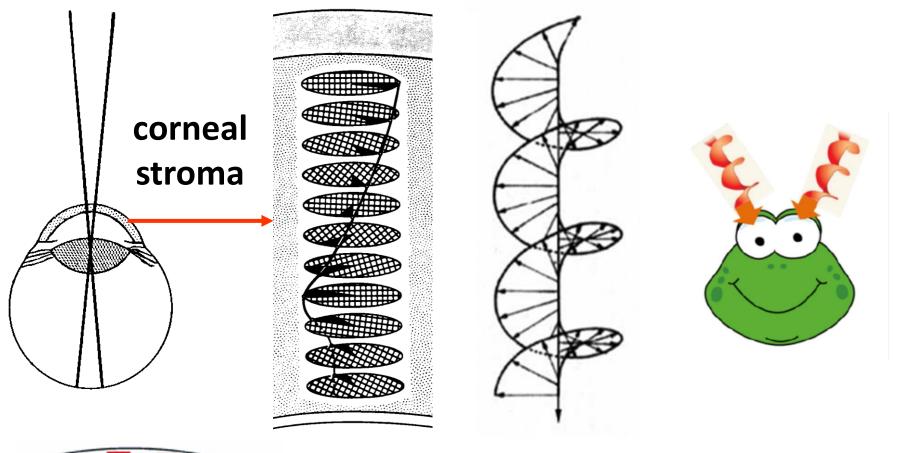


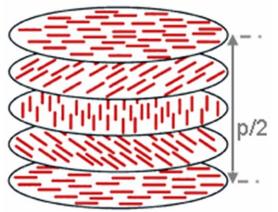


Luc Montagnier
French virologist,
recipient of the 2008
Nobel Prize for the
discovery of the human
immunodeficiency virus
(HIV).

Succussion or dilution with a vortex mixer

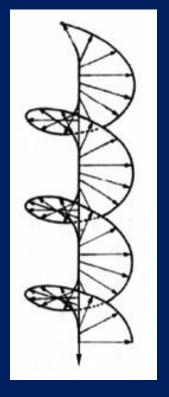
## Biology confirms the vortex structure of space and light:





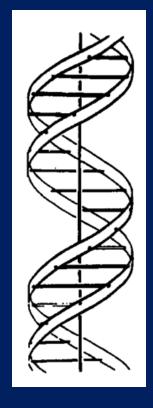
Light spirals into both eyes in a right-handed helix.

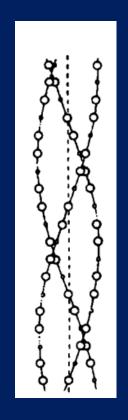
## Both the fabric of space and the fabric of the body have spiral grains.



light spirals through space

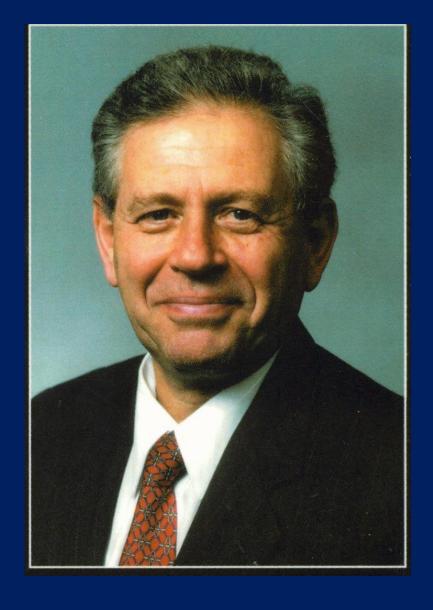
energy spirals through molecules

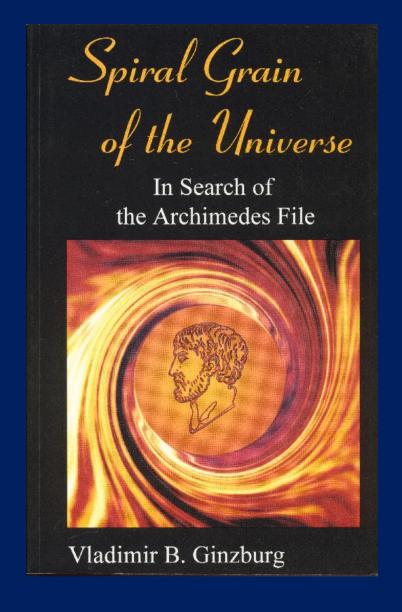




DNA

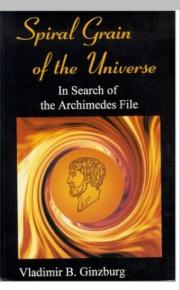
IA collagen

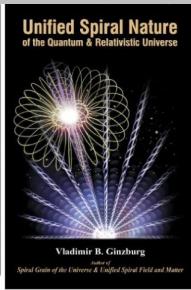


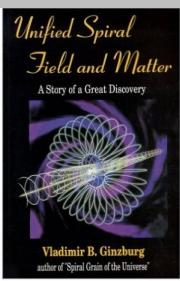


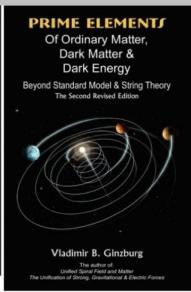
Vladimir B. Ginzburg

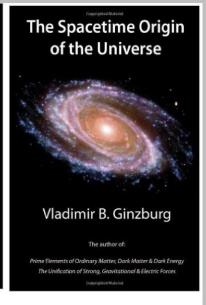
## Vladimir Ginzburg's 5 books on the spiral grain of the universe:





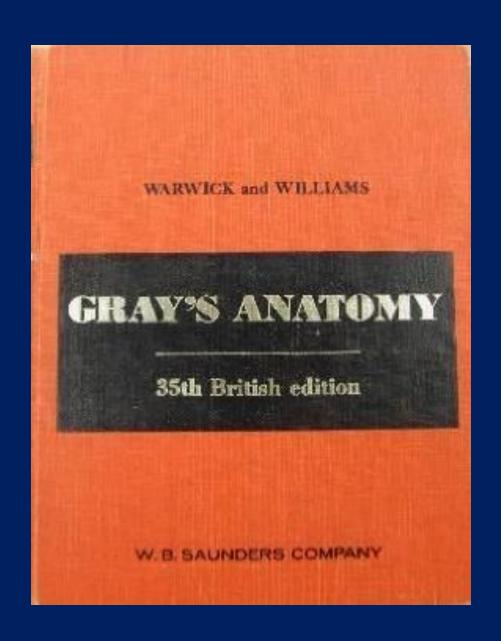






### Sensation and perception

# We have reached the heart of the matter!



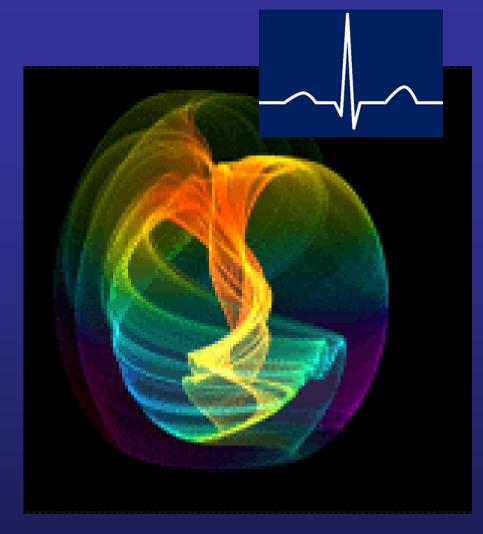
Guasp FT, 1970.

The electrical

circulation.

Guasp, Dena.





Like collagen and the fabric of the quantum information field, the heart is a helical structure. Electrical energy spirals through the heart with each heartbeat.

The arrangement of ventricular myocardial fibers is so unusual and perplexing, that it has long been considered as forming a kind of Gordian knot of Anatomy. Of the complexity of the arrangement, I need not speak further than to say, that Vesalius, Haller and De Blainville, all confessed their inability to unravel it.

~Dr. Francisco Torrent-Guasp



You can watch Spanish cardiologist Dr. Francisco Torrent Guasp dissect a cow heart to reveal the helical structure of the ventricular myocardial band:

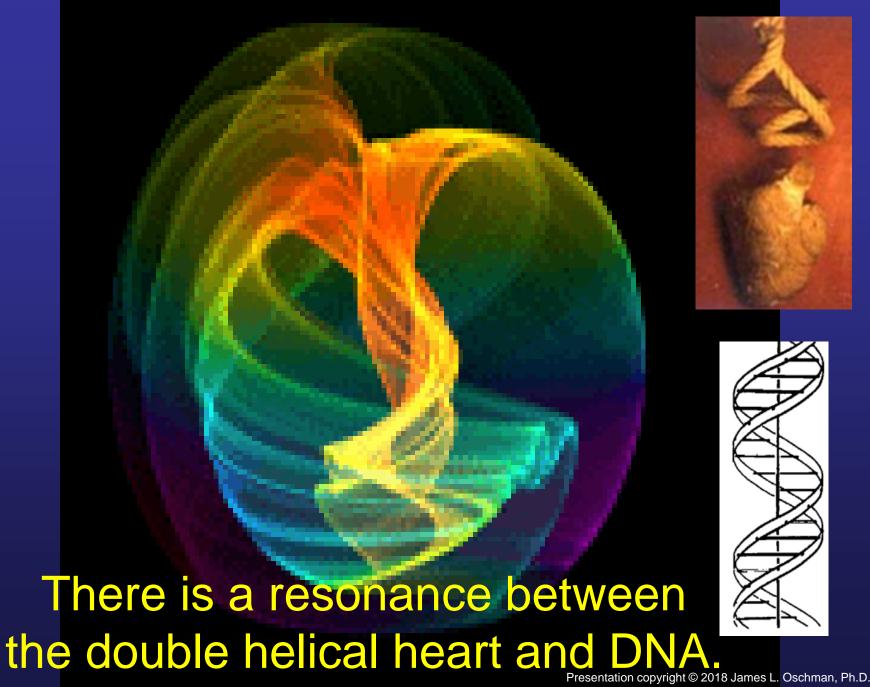
https://www.youtube.com/watch?v=NHI4DUu1bEI

We will watch this video from 6:15 to 9:30.



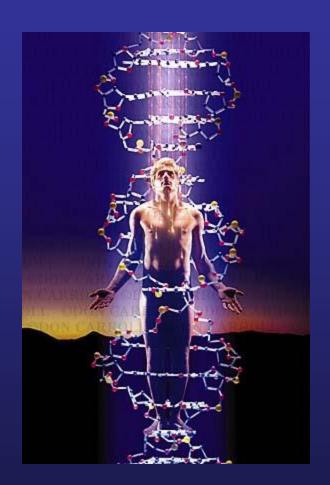


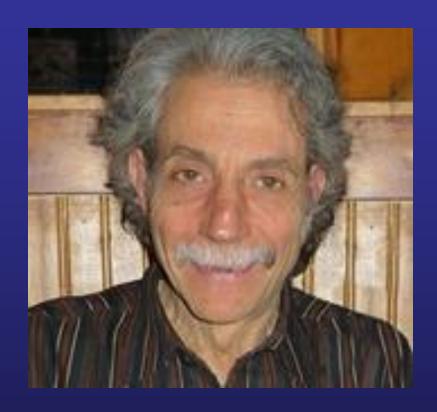
Presentation copyright © 2018 James L. Oschman, Ph.D.



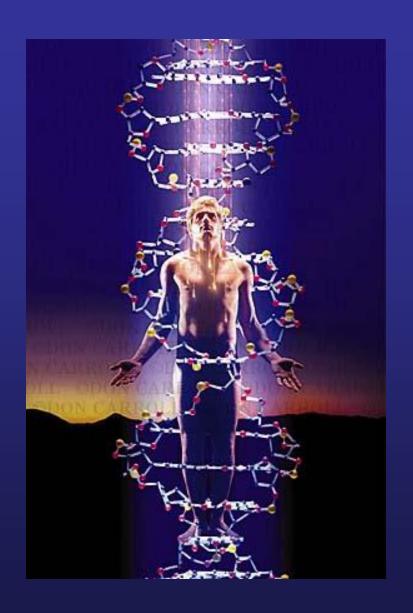
#### Heart - DNA resonance:



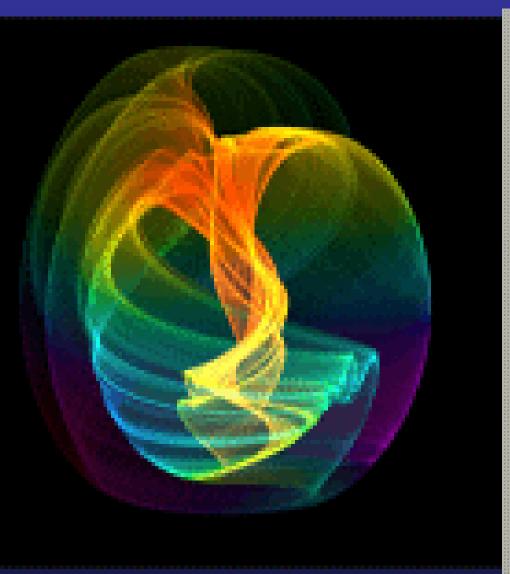


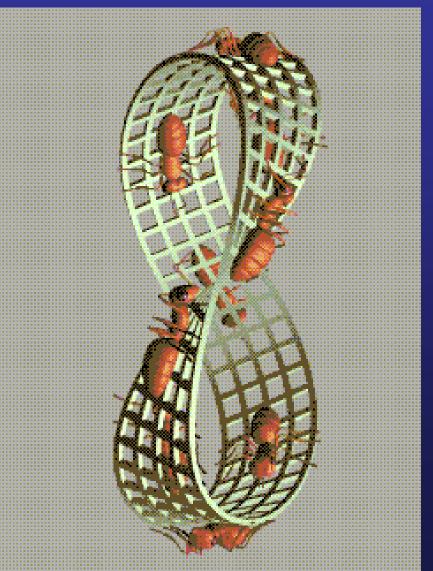


Dr. Glen Rein



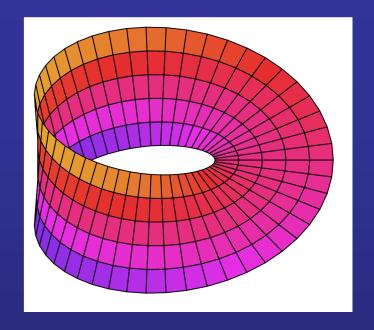
#### The helical heart, space and time.

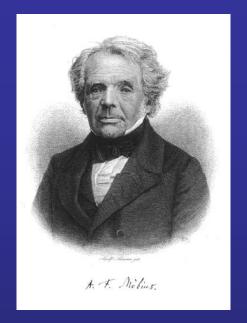






This model shows that the threedimensional ventricular architecture can be regarded as a geometrically nonorientable surface, similar to triple-twisted Möbius strip. A Möbius strip is a one sided surface that is constructed from a three-dimensional rectangle. Twisting this paper-strip for 180° (one or more times) and attaching the ends to one another seems to eliminate one dimension of three dimensional space. This possibility only exists in the curved space—time continuum revealed by Einstein.





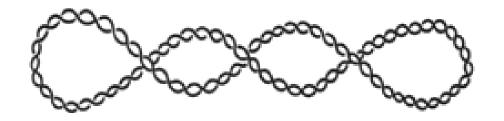
August Ferdinand Möbius (1790–1868)

The Möbius strip or Möbius band was discovered independently by the German mathematicians August Ferdinand Möbius and Johann Benedict Listing in 1858.

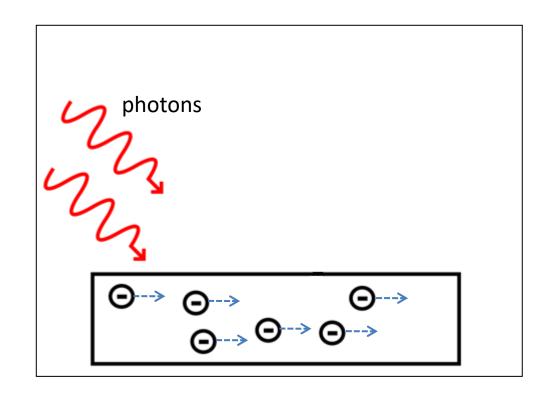
## DNA is also a Möbius strip!

#### Non-classical fields:

scalar fields spin fields torsion fields



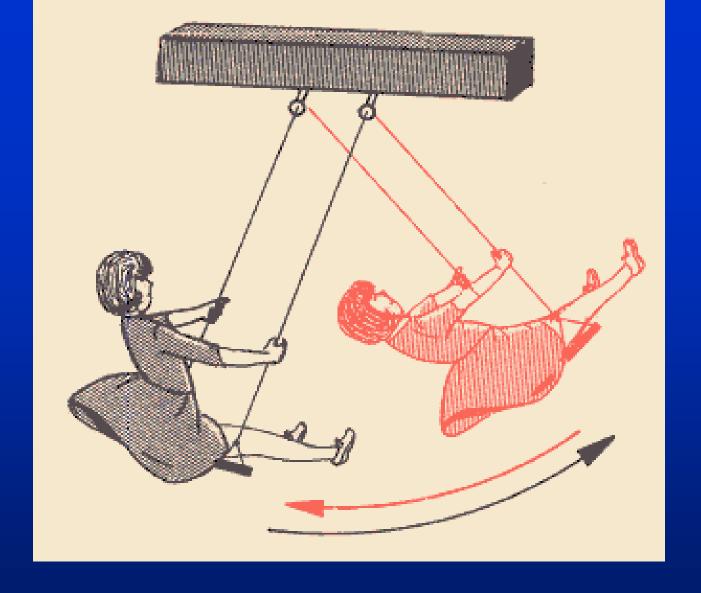
The DNA antenna in mitochondria is a supercoil. These Möbius supercoil DNA molecules are hypothetically able to radiate or absorb scalar fields. Most cells in the body contain thousands of these Möbius supercoils.



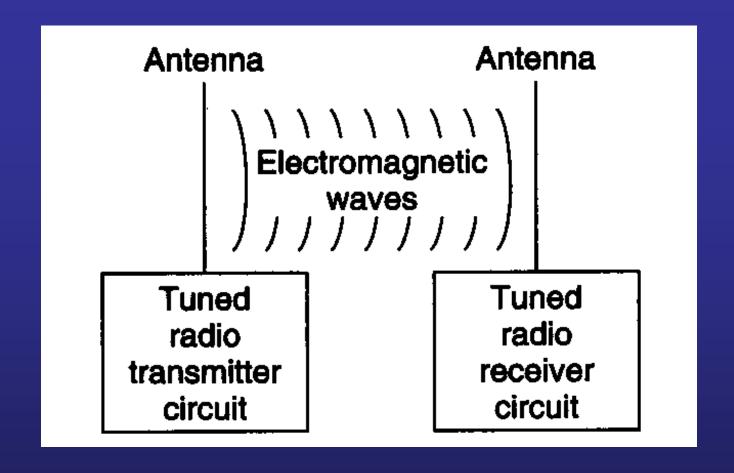
The photoconductive effect:
Light will cause a material to become more electrically conductive.

#### Resonance:

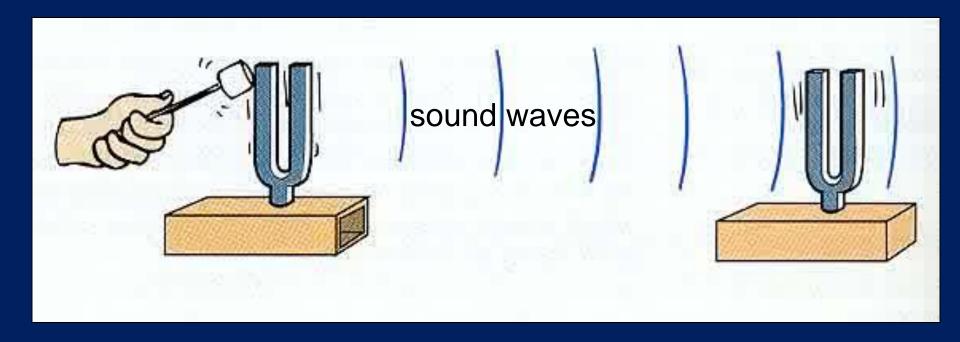
 Resonance: the tendency of any object to oscillate or vibrate at maximum amplitude at certain frequencies, known as the system's resonant or natural frequencies.



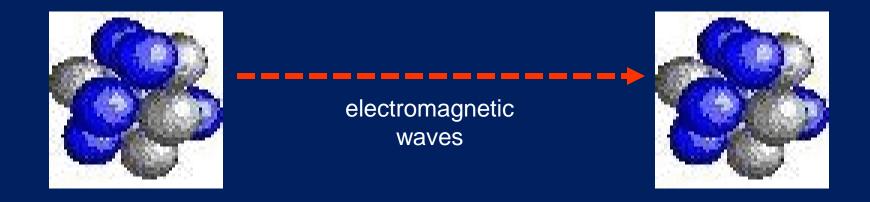
Resonance



Resonance enables transmissions of radio signals over very long distances.

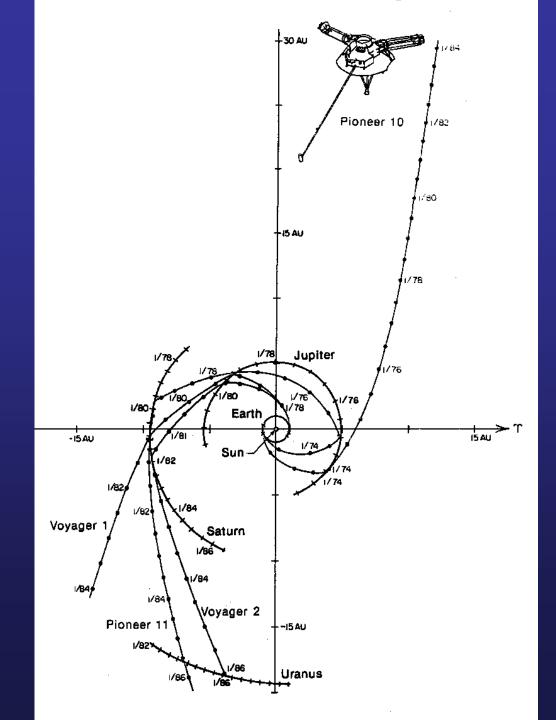


Resonance or the tuning-fork effect: objects do not have to touch to interact.



Resonance or the tuning-fork effect: molecules do not have to touch to interact.

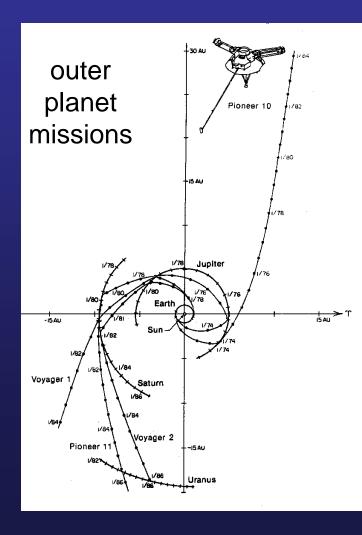
Pioneer 10 the first manmade object to leave the solar system.



# An example of electromagnetic resonance: USA Today

Monday, March 4, 2002, page 3A

In 1983, Pioneer 10 became the first manmade object to leave the solar system. On the 30<sup>th</sup> anniversary of its launch, NASA sent a message to Pioneer, which was then 7.4 billion miles away. A response was received 22 hours and six minutes later. Pioneer's last, very weak signal was received on 23 January 2003, when it was 7.6 billion miles away.



#### Pilot waves

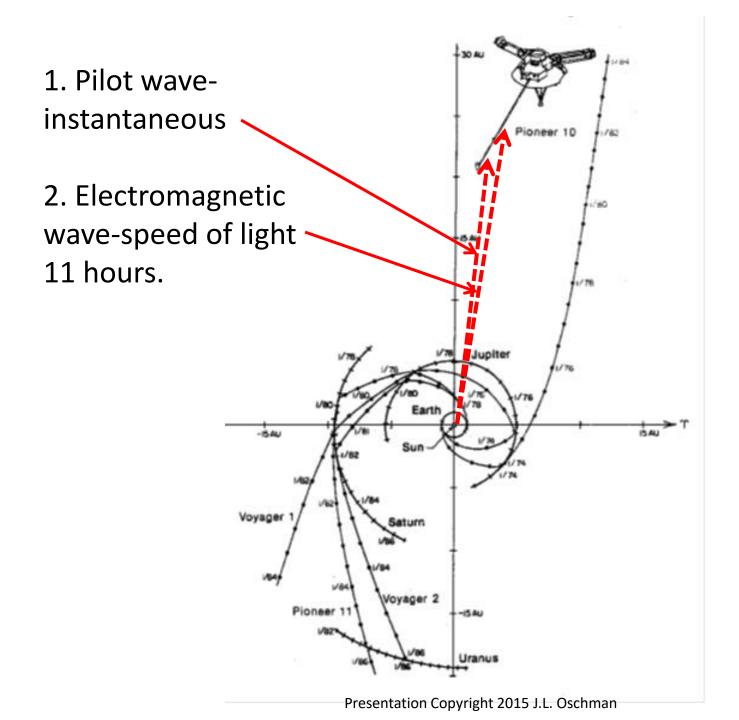
Albert Einstein had a close associate, Hugo (Hans) Martin Tetrode, a Dutch theoretical physicist who made early contributions to statistical physics including the quantisation of the classical gas laws, known as the Sackur-Tetrode equation. In 1922, Tetrode published the following statement:

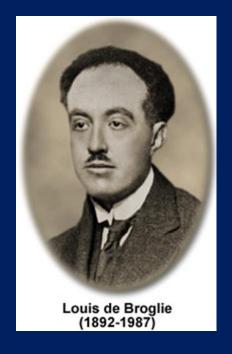
When I see light from a star 100 light years away, not only do I know that the light was emitted 100 years ago but also a group of atoms in the star "knew" that the light would enter my eye 100 years later, before I even existed!

~Hans Tetrode

Zietshrift fur Phyzik, 10, 317 (1922)

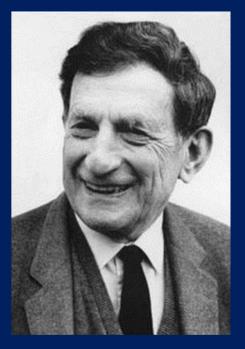
Remarkably, Einstein thought Tetrode was correct.





The Guiding Equation:





David Bohm 1917-1992 Theoretical physicist

The de Broglie-Bohm theory or the pilot-wave model is a version of quantum theory discovered by Louis de Broglie in 1927 and rediscovered by David Bohm in 1952.



Opinion Open Access

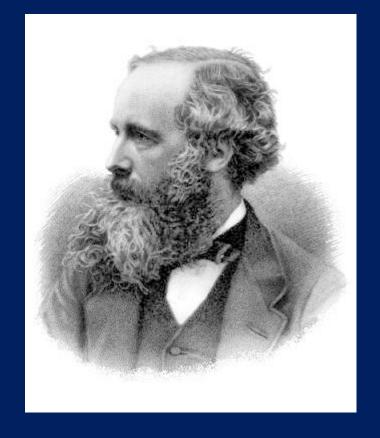
#### Vortical Structure of Light and Space: Biological Implications

James L Oschman\* and Nora H Oschman

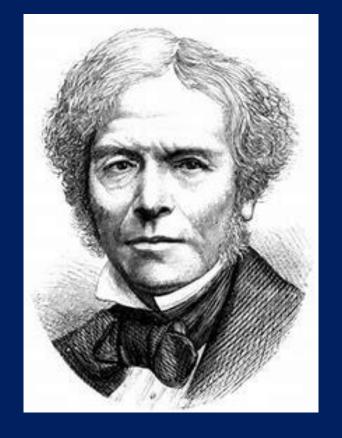
Nature's Own Research Association, Dover, New Hampshire, USA

Vladimir B Ginzburg published 5 books on the vortical structure of space and electromagnetic fields, tracing the repeating cycles as such models went in and out of vogue over the centuries. James Clerk Maxwell and his friend, Michael Faraday supported a vortex theory of electromagnetism with potential fields as the centerpiece.

#### James Clerk Maxwell



James Clerk Maxwell 1831-1897



Michael Faraday 1791-1867

Faraday never made a serious study of mathematics while Maxwell was a skilled mathematician. However, they developed a common language to enable mathematical conclusions to be expressed in common language "as fully, clearly, and definitely as in mathematical formulae."

### Maxwell's equations

$B = V.\nabla A$
$\mathbf{E} = \mathbf{V}.\mathbf{v}\mathbf{B} - \dot{\mathbf{A}} - \nabla \mathbf{\Psi}$
$F = V.vB + eE - m\nabla\Omega$
$B = H + 4\pi M$
$4\pi J_{tot} = V.\nabla H$
J = CE
$D = \frac{1}{4\pi} KE$
$J_{tot} = J + \dot{D}$
$B = \mu H$
$e = S.\nabla D$
$m = S.\nabla M$

 $H = -\nabla \Omega$ 

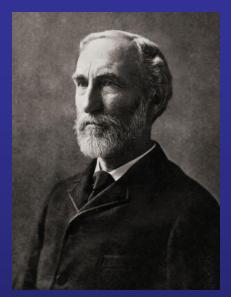
Name	Differential equations
Gauss's law	$\nabla \cdot \mathbf{E} = \frac{\rho}{\varepsilon_0}$
Gauss's law for magnetism	$\nabla \cdot \mathbf{B} = 0$
Maxwell-Faraday equation (Faraday's law of induction)	$\nabla \times \mathbf{E} = -\frac{\partial \mathbf{B}}{\partial t}$
Ampère's circuital law (with Maxwell's addition)	$\nabla \times \mathbf{B} = \mu_0 \left( \mathbf{J} + \varepsilon_0 \frac{\partial \mathbf{E}}{\partial t} \right)$

In 1865 Maxwell published his seminal theory of electromagnetism, A Dynamical Theory of the Electromagnetic Field. His 20 equations describing the electromagnetic field consisted of three equations each for magnetic force, electric currents, electromotive force, electric elasticity, electric resistance, total currents; and one equation each for free electricity and continuity.

Maxwell expressed electromagnetism with quaternion mathematics and made the electromagnetic potential the centerpiece of his theory. Faraday and Maxwell had agreed that the potentials were the real movers in electricity, magnetism, and electromagnetism, causing things to happen like the puppets are moved by the invisible puppeteers behind a curtain.

In his final classic paper on the electromagnetic field Maxwell left out vortex models and used 20 quaternion equations. Two years after Maxwell's early death (he was only 48 years old), Oliver Heaviside replaced the quaternions with vector algebra, and eliminated the potential fields as "arbitrary" and unnecessary. By the end of the 1800's the Maxwell equations had been reduced from the original 20 to the 4 we find in physics texts today.

#### Scalar: What are we talking about?



Josiah Gibbs 1839 -1903



Karl Friedrich Gauss 1857-1894



Oliver Heaviside 1850-1925

According to Heaviside, the electromagnetic potential was arbitrary and needed to be eliminated. In the end, Heinrich Hertz, Josiah Gibbs and Oliver Heaviside prevailed. They deleted the potential concepts that both Faraday and Maxwell had considered the most important features of the theory of electromagnetism.

Deleting the potentials from Maxwell's equations deprived physics, biology and medicine of important useful tools for nearly a century.

As a result, some of the most pressing and unsolved mysteries related to health and disease persist, and some powerful healing technologies were bypassed because there was no adequate electrodynamic theory to explain and advance them.

## The potential fields were revived by the classic study of the Aharonov–Bohm effect:

Aharonov, Y; Bohm, D (1959).
"Significance of electromagnetic potentials in quantum theory". Physical Review. 115: 485–491.

Aharonov, Y; Bohm, D (1961). "Further Considerations on Electromagnetic Potentials in the Quantum Theory".

Physical Review. 123: 1511–1524.

https://en.wikipedia.org/wiki/Aharonov%E2%80%93Bohm\_effect

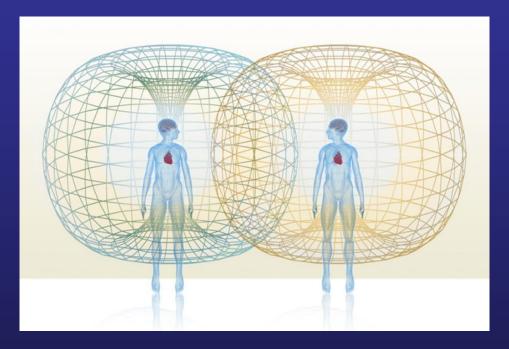
#### Atomic magnetometer:

A few years ago Paul Mawson, from one of the major semiconductor companies, approached me for advice for a project he was working on. He had met Valerie Hunt, and she had inspired him to develop a device that could replace the stethoscope. Instead of listening to heart beats, it would show a real-time image of the biofield of the heart. I met Paul again and eventually he sent me information on the system he had developed with Rahul Mhaskar. Paul gave me a link to a nice video of the device in operation. I copied the following illustrations from that video. I am glad I did because the video is no longer available. Link below shows device:

http://mfam.geometrics.com/

#### A new stethoscope:

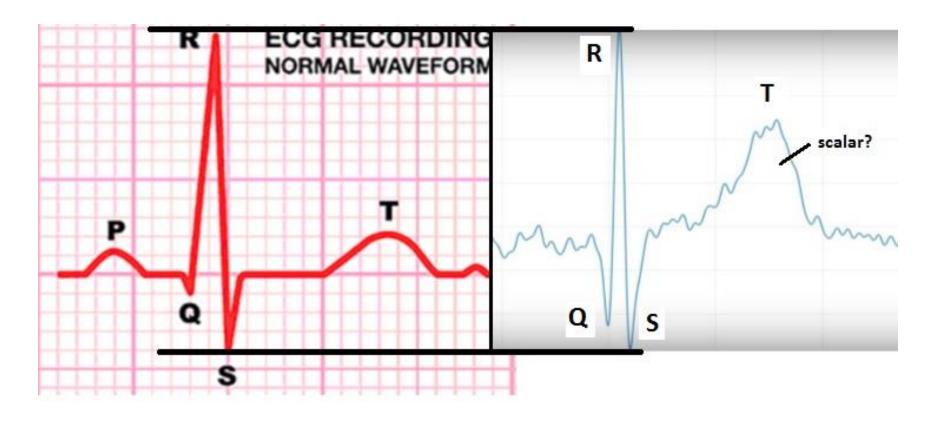




Instead of listening to the heart sounds, it would show the biomagnetic field of the heart.

# Detecting scalar fields from the heart with a scalar atomic magnetic sensor





The T-wave is produced by the repolarization of the ventricle.

#### **Konstantin Meyl**

# Scalar waves



From an extended vortex and field theory to a technical, biological and historical use of longitudinal waves.

Edition belonging to the lecture and seminar "Electromagnetic Environmental Compatibility"





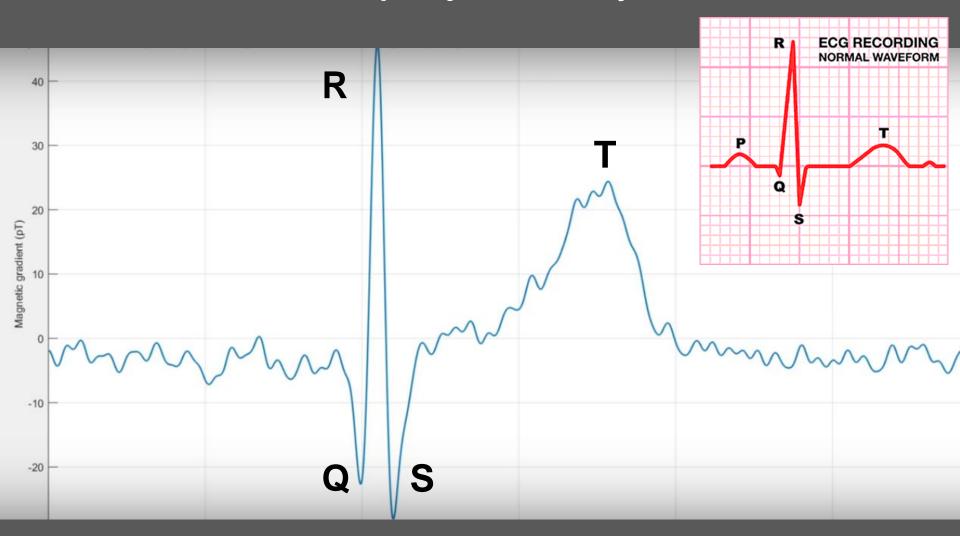


These are scalar waves.

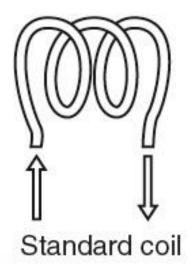
www.k-meyl.de

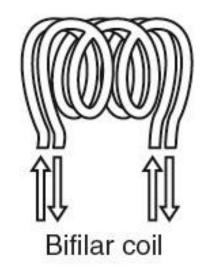
www.meyl.eu

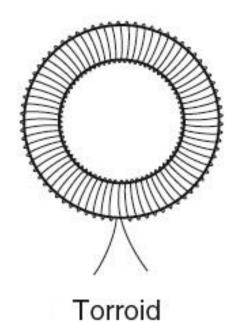
## Scalar fields projected by the heart:

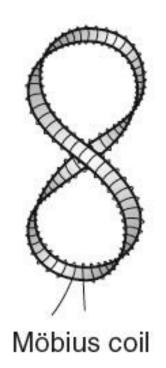


Comparing the scalar and electrical fields suggests that much of the T-wave may be scalar.









Scalar field antennas.

#### **Vortex Science and Technology**

Oschman and Oschman, J Vortex Sci Technol 2015, 2:1 http://dx.doi.org/10.4172/2090-8369.1000112

Opinion Open Access

Vortical Structure of Light and Space: Biological Implications

James L Oschman\* and Nora H Oschman

Nature's Own Research Association, Dover, New Hampshire, USA

https://www.researchgate.net/publication/275221950 Vortical Structure of Light and Space Biological Implications



Perspective Open Access

#### The Heart as a Bi-directional Scalar Field Antenna

Oschman JL\* and Oschman NH

Nature's Own Research Association, Dover, New Hampshire, USA

https://www.researchgate.net/publication/283660858
The Heart as a Bi-directional Scalar Field Antenna

A possible relationship between the heart, mind, and space. And a possible basis for intuition, clairvoyance and the morphic field?

Our research shows that the mind is constantly scanning several seconds into the future. Measurable physiological changes arise in the heart before they arise in the brain.

~Rolland McCraty

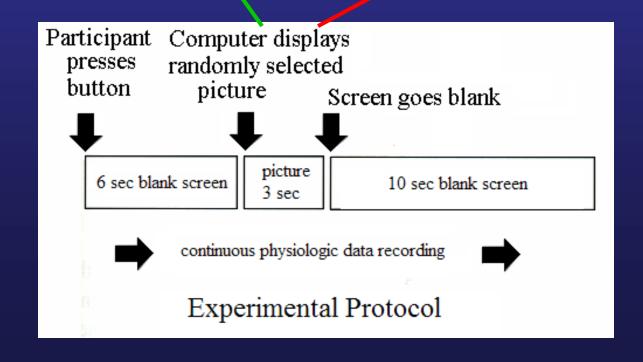
Journal of Alternative and Complementary Medicine 2004: Volume 10 (1) and (2)

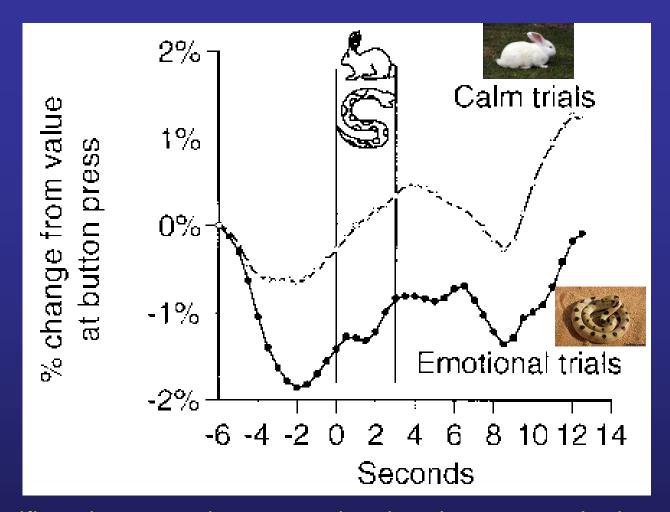




peaceful scene

emotional scene





- A significantly greater heart rate deceleration occurred prior to future emotional stimuli compared to calm stimuli.
- The heart is involved in the processing and decoding of intuitive information.
- Females appear to be more more attuned to intuitive information from the heart than males.

The heart's field may be linked to a more subtle energetic field that contains information on objects and events remote in space or ahead in time.

~Rolland McCraty

# The blueprint of life

# Why would Syntonic practitioners be interested in life's blueprint?

When radioactive isotopes became available for the first time for biological research, it was possible to do far-reaching experiments described in an important little book published in 1942 with the title "The Dynamic State of Body Constituents." It contained three Dunham Lectures that had been presented at Harvard University by Rudolf Schoenheimer, M.D, of Columbia University.



In these lectures, Schoenheimer described his pioneering studies using isotopes to label organic compounds that could be incorporated into the diets of animals. The radioactive isotopes could be traced to see if the compounds appeared in the tissues of the animal or were excreted.

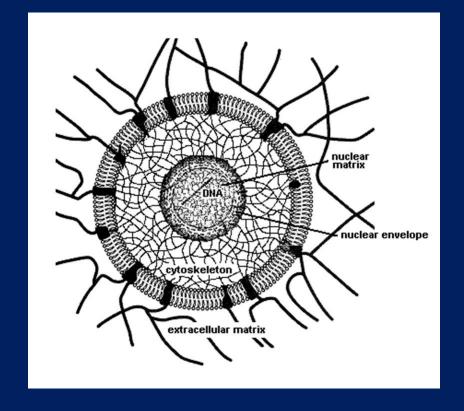


Rudolf Schoenheimer MD 1898-1941

Schoenheimer's results were totally surprising. In the past, biologists had regarded the structure of the adult body as relatively fixed and permanent, although a few scientists had introduced the notion that a small portion of the dietary intake might be used to repair and replace structures that undergo wear and tear. To their great surprise, Schoenheimer and his colleagues discovered that a very large fraction of the isotopically-labeled compounds provided in the diet were rapidly incorporated into the tissues.

In 1979, Sarah Ratner, a colleague of Schoenheimer, reviewed the way his discoveries evolved after his initial research. Schoenheimer had developed a concept of "metabolic regeneration" that has stood the test of time. The large molecules in the body, such as fats and proteins, are constantly being assembled and disassembled. The various bonds or linkages that hold them together are constantly being opened, enabling their building blocks (fatty acids and amino acids, respectively) to be liberated. The fragments then enter what has been called the metabolic "pool," which is also fed by absorption of the same materials from the digestive tract.

Ratner, S., 1979. The dynamic state of body proteins. Ann. N.Y. Acad. Sci. 325:189-209.



The metabolic pool is located within the sponge-like interstices of the meshwork of the living matrix. Some of the molecules in this pool are degraded and excreted, while others are reassembled back into the large molecules.

All of the reactions involved are balanced so precisely that the body components remain nearly constant in quantity, position, and structure. The lytic or degradative enzymes that take structures apart are balanced by synthetic or generative reactions.

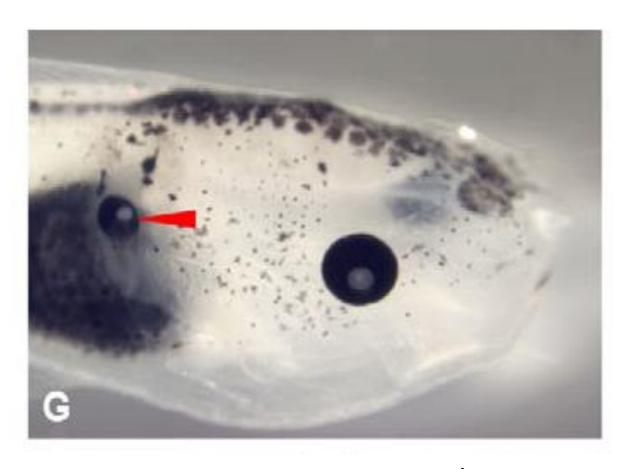
And these lytic and synthetic enzymes are themselves proteins that are constantly being assembled and taken apart. The process is controlled by the cell nucleus, which fine-tunes the rates of production and degradation of the enzymes.



### Michael Levin

Cancer can be viewed as a disease of geometry. Tumor tissue results from growth, which is not patterned appropriately, because it is unable to perceive or execute morphogenetic cues.

Electromagnetic fields are an integral part of information flows in some morphogenetic processes.



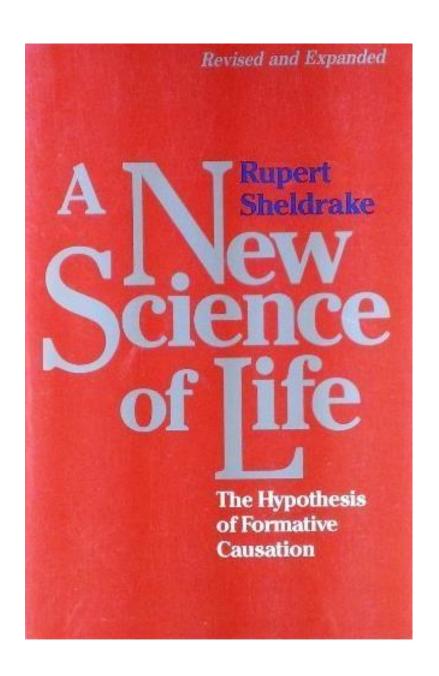
Ectopic eye tissue in tail

Pai, Aw, Shomrat, Lemire & Levin, 2012. Transmembrane voltage potential controls embryonic eye patterning in *Xenopus laevis.* Development 139, 313-323.

# Morphogenetic fields

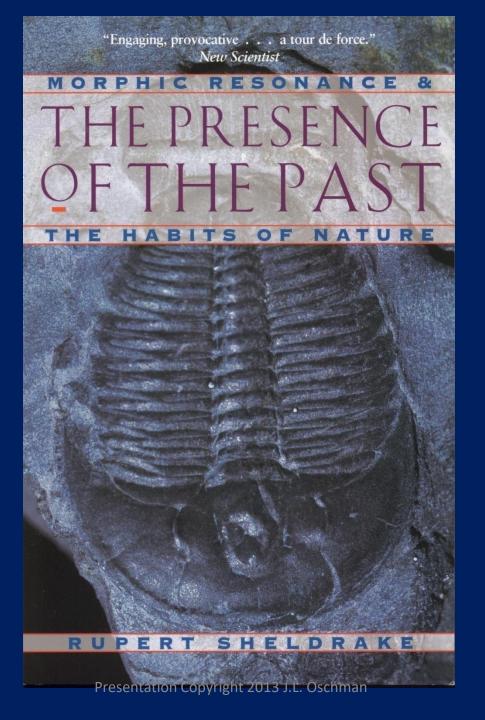


Rupert Sheldrake:
Memory and morphology
depend on morphic resonance –
a resonance across time.



# First published 1981

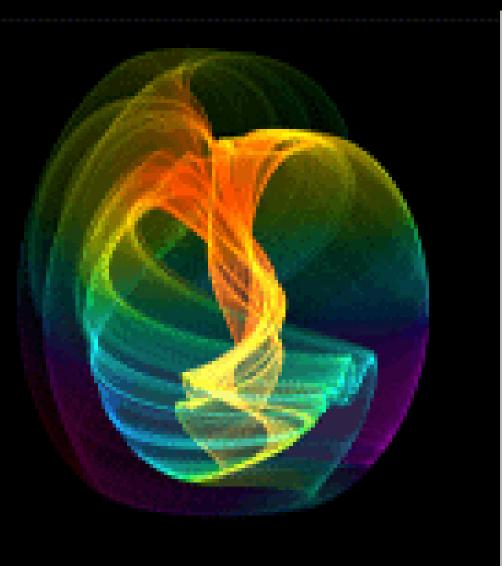
A Revised and Expanded Edition of A New Science of Life MORPHIC RESONANCE THE NATURE OF FORMATIVE CAUSATION "Rupert Sheldrake's contributions will be recognized one day on the same level as those of Newton and Darwin." **DEEPAK CHOPRA** RUPERT SHELDRAKE

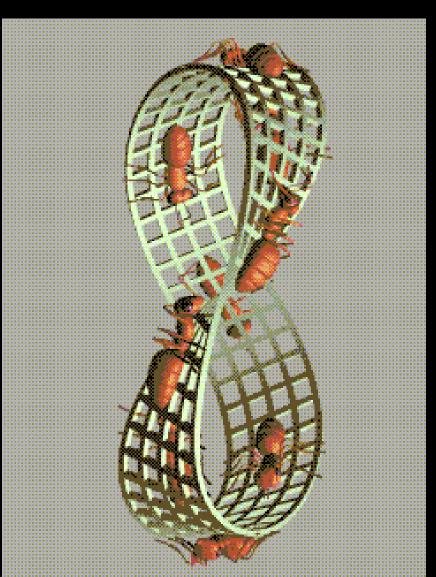


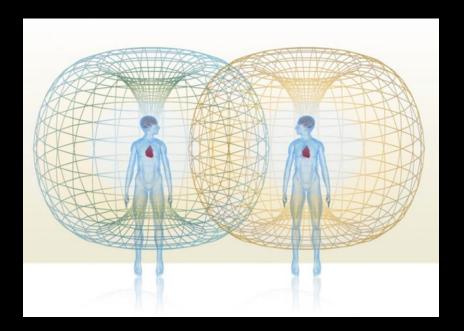
### Rupert Sheldrake: New Science of Life

- Morphogenetic fields give rise to all forms.
- Matter assumes form when it resonates with a field.
- The fields involved are not classical electromagnetic fields.
- Morphogenetic fields are derived from a body's own past actions and from the structures and actions of ancestors.
- Fields act across space and time.

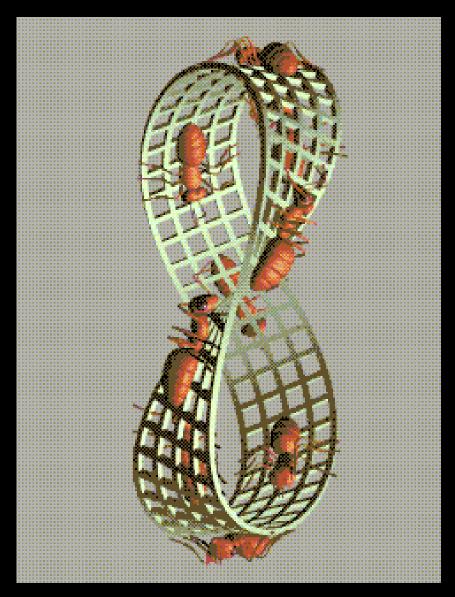
# The helical heart, space and time.





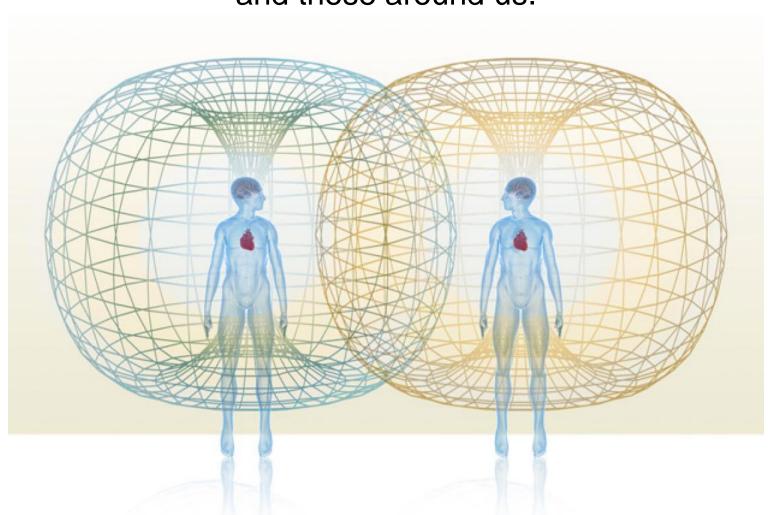


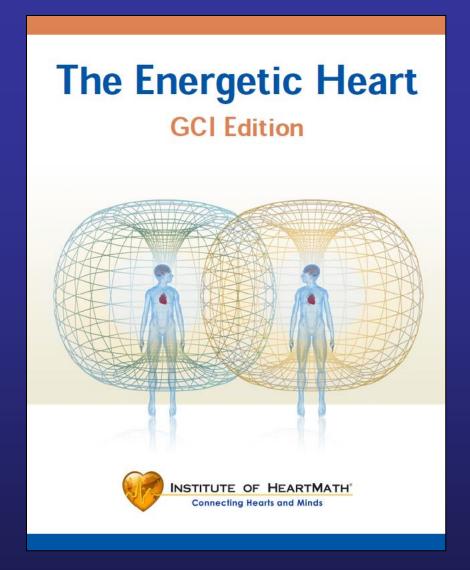
As a bi-directional Möbius structure, the human heart seems suited for linking holographic organisms to each other and to a holographic environment, and vice versa, via scalar fields.



# Energetic hygiene – fields of the heart

Our hearts are bi-directional antennas. We are immersed in each other's fields. Our thoughts affect all parts of our bodies and those around us.





https://www.heartmath.org/assets/uploads/2 015/02/the-energetic-heart-gci-edition.pdf

Presentation Copyright 2015 J.L.
Oschman

# Small is powerful, less is more!





# Or: Why use a hammer when a feather will work better!







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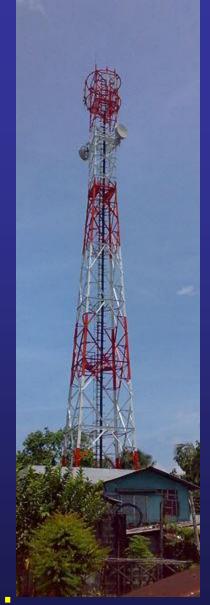




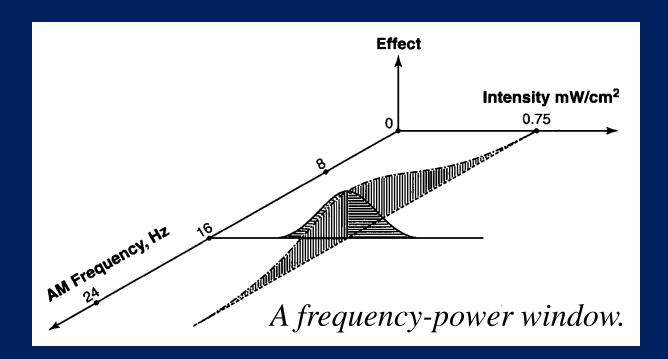


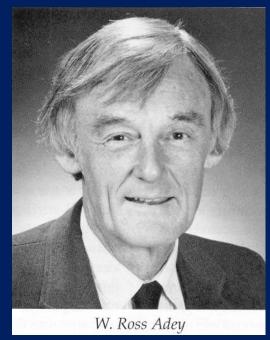
"I have no doubt in my mind that at the present time the greatest polluting element in the earth's environment is the proliferation of electromagnetic fields."

- Robert O. Becker, M. D., Orthopedic Surgeon



# Electromagnetic pollution.





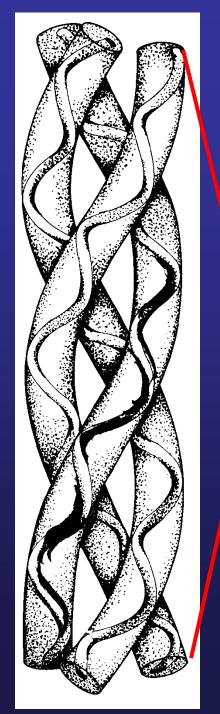
1922-2004

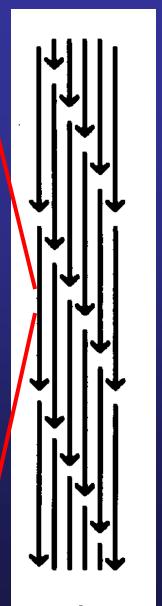
Modern biophysical research has confirmed that tissues respond to very tiny energy fields of the appropriate frequency, intensity, and pulse shape. If you are not getting results, try <u>less</u> energy or <u>shorter</u> treatments.

Many studies have shown that humans and other organisms are extremely sensitive to very weak non-ionizing fields. At first these findings were greeted with skepticism in the scientific community, because it seemed impossible for tissues to react to signals of such low intensity. But a symposium on the subject concluded that:

"... a striking range of biological interactions has been described in experiments where control procedures appear to have been adequately considered. The existence of biological effects of very weak electromagnetic fields" suggests an extraordinarily efficient mechanism" for detecting these fields and discriminating them from much higher levels of noise.

Adey, W.R. and S.M. Bawin, 1977. Brain interactions with weak electric and magnetic fields. Neurosciences Research Prog. Bull. 15(1):1-129.



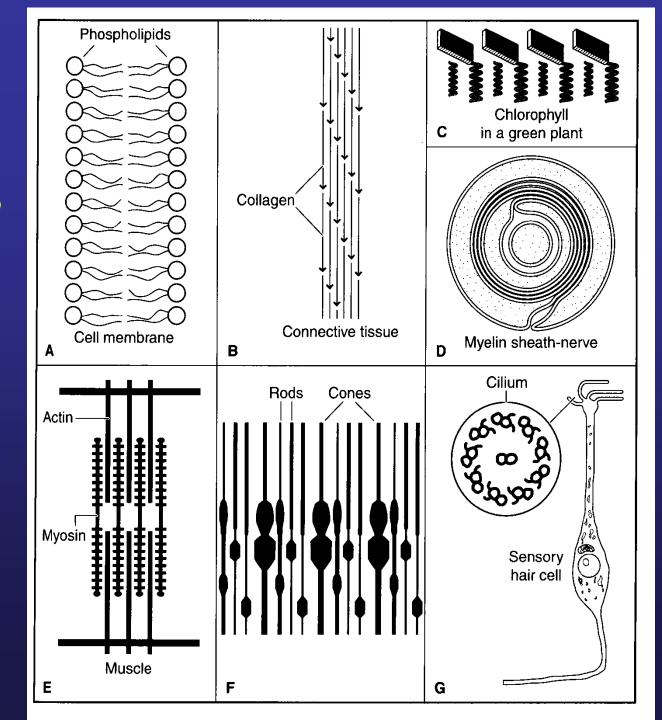


Collagen crystalline arrangementactually liquid crystals When the energy level in these liquid crystals reaches a certain level, the molecules begin to vibrate coherently, leading to the emission of coherent light.

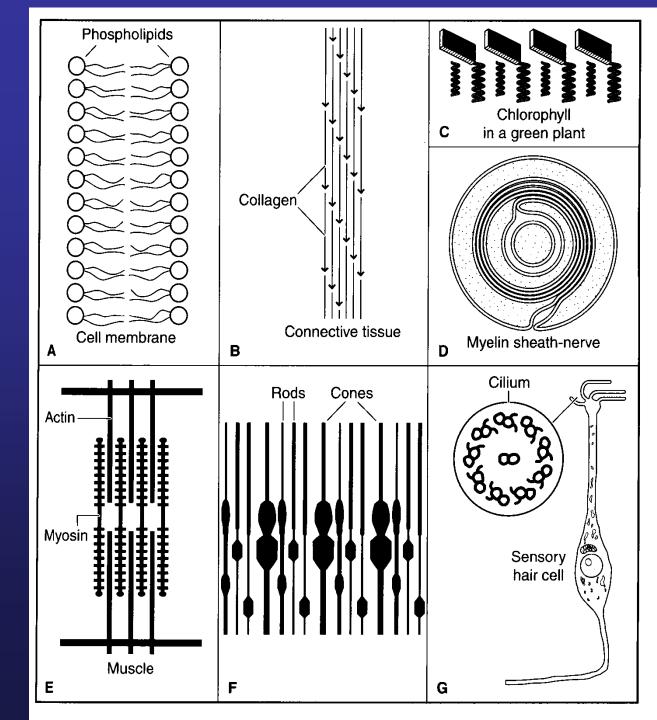
~Herbert Fröhlich



~Fritz Albert Popp



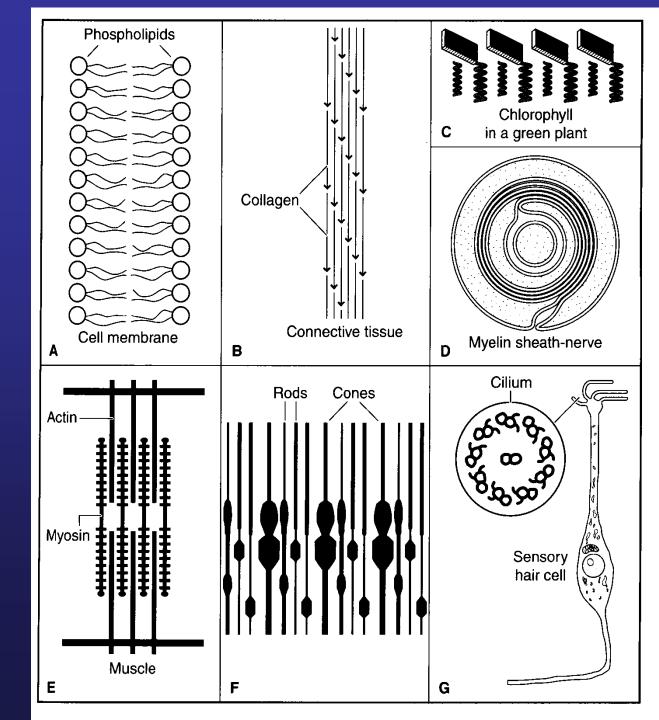
This is true of all crystalline materials in living systems.

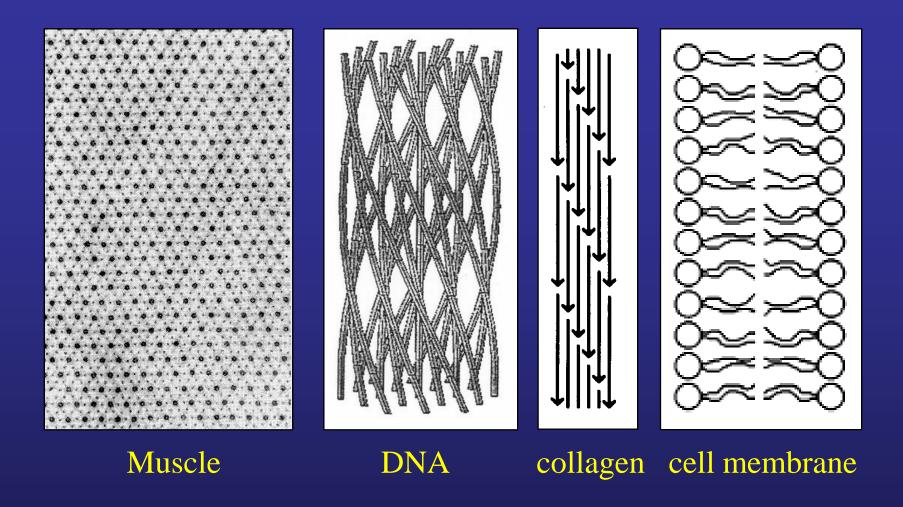


Molecular arrays in living systems: Liquid crystals:

Liquid crystallinity gives organisms their characteristic flexibility, exquisite sensitivity and responsiveness, and optimizes the rapid noiseless intercommunication that enables the organism to function as a coherent coordinated whole.

~Mae-Wan Ho Quantum coherence and conscious experience





Crystal from the Greek, krustallos κρύσταλλο meaning frozen light



Dr Mae-Wan Ho 1941-2016

We do not inherit the earth from our ancestors; we borrow it from our children - Chief Seattle

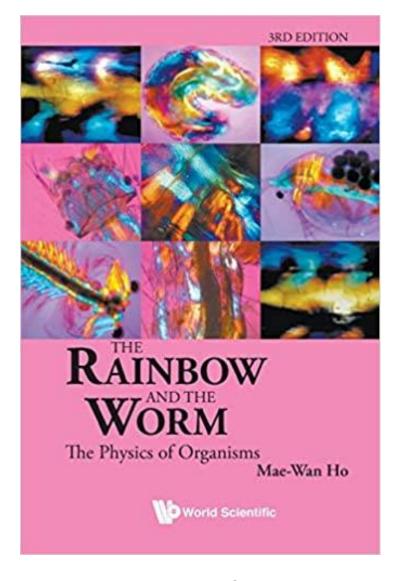


GM agriculture is a recipe for disaster. Future generations will not forgive us if we do not stop the GM takeover now.

- Dr. Mae-Wan Ho

Mae-Wan Ho on coherence:

https://www.yout
ube.com/watch?v
=DNzQIbvQ0xk



Institute of Science in Society, London

