

# Smart Life Forum

www.smartlifeforum.org

NEXT MEETING: Thursday, June 16, 2011, at 7pm

## Garry Gordon MD, DO, MD(H)

on

## Energy Healing – Placebo or Reality?

### Short Presentation:

#### “Enermetrics, Bio Energy Analysis”

Presented by **Dr. John Baranuk**

John Baranuk is a Naturopathic Doctor. He has studied alternative, complementary, and integrative medicine for 15 years and works with 5 other Naturopaths. Together they practice a whole body energetic medicine approach to optimal health, anti-aging, and longevity. They call this approach, Enermetrics. Their interpretation of enermetrics is the measurement of energy as displayed by the human biofield. We all know that biometrics refers to technologies that measure DNA, voice, face, retinas, signatures, fingerprints, etc. Enermetrics is a statistical study of biological phenomena of the human biofield that display energy signatures.

Basically, the technique is energy-mapping the human body. They utilize a non-invasive approach to discover the bio-data that is out of balance. This approach involves using a number of proprietary computerized biofeedback programs that can “read” any clients biofield, and can determine a course of correction for each client. They can scan over 4,000 products to determine the most efficient product as it relates to each clients request or need.

Further information is imported to assist in correction. This approach is done remotely. They have thousands of clients and can analyze anyone worldwide. John is also involved in research and development of selected products and future projects that he hopes will launch from Silicon Valley with the help of local investors.

**Foundation for Mind Being Research (www.FMBR.org)**

No scheduled meetings for June.

### Presentation Location:

Cubberley Community Ctr.  
Room H1  
4000 Middlefield Rd.  
Palo Alto, California

*For those who cannot attend  
we will have live streaming  
and video archiving at  
<http://SmartLifeForum.org/live>*

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## Meet Dr. Garry Gordon

GARRY F. GORDON, MD, DO, MD (H), received his Doctor of Osteopathy in 1958 from the Chicago College of Osteopathy in Illinois, his honorary MD degree from the University of California Irvine in 1962 and his Radiology Residency from Mt. Zion in San Francisco, California in 1964.

Dr. Gordon's Specialties include Oral Chelation Therapy, Aging, Arthritis, Autism, Alzheimer's, Cancer, Cardiovascular disease, Diabetes, Menopause, Multiple Sclerosis, Parkinson's disease, and various other conditions related to Autoimmune Disorders.



A past Board Member of Arizona Homeopathic Medical Examiners for nine years and Co-Founder of the American College for Advancement in Medicine (ACAM), Dr. Gordon is currently President of Gordon Research Institute (GRI). Presenting over 40 years of scientific and clinical research, Dr. Gordon hosts an online F.A.C.T. group (Forum on Anti-Aging & Chelation Therapies), where medical professionals can conference and exchange knowledge with over 2600 alternative medicine practitioners.

Recognized as the "Father of Chelation Therapy" Dr. Gordon is an expert on nutrition, mineral metabolism, and longevity. He serves as full-time consultant for Longevity Plus, LLC – a nutritional supplement company based in Payson, Arizona where he is responsible for designing effective, natural, nontoxic alternative supplements for the treatment of every disease known to man.

Dr. Gordon has written many articles, and several books:

*The Chelation Answer* (with Morton Walker, DPM)

*The Omega 3 Miracle – The Icelandic Longevity Secret*

*The Promise of Pure sterol* (with Robert Horn)

*Detox with Oral Chelation: Protecting Yourself from Lead, Mercury, & Other Environmental Toxins* (with David Jay Brown)

His extensive website is: <http://GordonResearch.com>  
Nutritional products he designed: <http://LongevityPlus.com>

### Future Speakers:

July 21:  
Adiel Tel-Oren MD DC

August 18:  
Harvey Bartnof MD

September 15: TBA

### About Smart Life Forum

Smart Life Forum, Inc. is a 501(c)(3) California nonprofit corporation whose primary mission is to provide credible health education to the public with an emphasis on optimal wellness, anti-aging medicine, and longevity.

Annual memberships in Smart Life Forum, Inc. and charitable donations are tax deductible to the extent allowed by law. For information on how to join or make a donation, please visit our website:

[www.smartlifeforum.org](http://www.smartlifeforum.org).

For questions, please contact Mike Korek at (650) 941-3058.

Quote from Dr. Gordon:

“Today’s rapidly increasing levels of pollution has made continuous oral chelation based detoxification essential for anyone hoping to reach their maximum intended useful lifespan, while enjoying optimum health.”

*Main Presentation:*

## **Pulsed Electro-Magnetic Field (PEMF) Therapy**

**by Dr. Garry Gordon, MD, DO, MD(H)**

Energy medicine is in our future and many are practicing this now. I have found useful answers that are dramatically improving my health, and anyone I treat, through the combination of my F.I.G.H.T. For Your Health program, and the latest developments in Energy Medicine modalities such as Pulsed Electro-Magnetic Frequencies (PEMF), Tesla-based electro muscle stimulation, low level lasers, and correctly designed magnetic sleep pads.

### **PEMF and Why We Need Magnetism**

The Earth is protected by an electro-magnetic field generated through what is called a “dynamo effect”. According to electromagnetic theory, the Earth’s liquid metallic core is stirred by convection. This motion coupled with the Earth’s rotation generates electric currents, and the electric currents in turn generate a magnetic field.

Over the past 155 years, scientists have been studying the decline of the Earth’s magnetic field and the effects it has on human health. When the first cosmonauts and astronauts were going into space, physicians noted that they experienced bone calcium loss and muscle cramps when they were out of the Earth’s magnetic field for any extended period of time. After this discovery was made, artificial magnetic fields were placed in the space capsules. NASA reports that our Earth’s Magnetic Field is collapsing rapidly, as we go into the time of Earth changes. Without a magnetic field there is no life and the experts believe that the

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earth's electromagnetic field has dropped from nearly 30 Gauss at the time of dinosaurs to 0.3 Gauss today.

Every organism on Earth has developed and evolved within this protective magnetic field. In order for our bodies to operate optimally, we need the proper type and intensity of electro-magnetism – like we need the proper types of food, water, air and sunlight. Some have called pulsed electro-magnetic frequency the “fifth element” required for life.

When we put anyone today in a chamber that blocks all the magnetic field, within hours you cannot raise your arm. Some of you have seen Dr. Dean Bonlie DDS, the former head of the North American Magnetic Research Association, who has introduced many ACAM doctors to the benefits of sleeping with 200 lbs of magnets between their mattresses providing 20 gauss when they sleep. These magnetic mattress pads are uniquely designed to specific frequencies and really make a tremendous difference in your energy.

### **Origins of Magnetic Therapy**

Magnetic therapy has been studied and documented throughout the centuries, from ancient times to the present. Magnets have long been believed to have healing powers associated with energy, muscle pain and stiffness. In the third century B.C. Aristotle wrote on the benefits of magnetism in the treatment of pain and other conditions. Chinese healers as early as 200 B.C. were said to use magnetic lodestones on the body to correct unhealthy imbalances in the flow of *qi*, or energy. The ancient Chinese medical text known as *The Yellow Emperor's Canon of Internal Medicine* describes this procedure. The Japanese have long used magnets in conjunction with needles on acupuncture points.

The ancient Egyptians are said to have used lodestones and can be seen depicted in their hieroglyph paintings. Cleopatra is reputed to have worn the magnetic stone against her forehead, and slept on a bed constructed of the material, believing it to enhance youth and beauty. The *Vedas*, or ancient Hindu scriptures, mention the treatment of various illnesses with lodestones. Australian aborigines and many African cultures also have traditionally used magnetic stones for healing.

In 1700's , France's Royal Society of Medicine conducted an in depth study about the history of magnets and their use in medical practice where they concluded that magnets were beneficial in the treatment of neck and back pain, headache, circulatory problems and many other complaints.

More recently we have reports about how Russian doctors used magnets to treat pain from limb amputations during WWII, and in 1959, Kyoichi Nakagawa, M.D., one of the world's foremost authorities on the therapeutic effects of magnetism and health, reported on several symptomatic conditions that responded favorably to magnetic therapy when all other methods failed.

### **Pulsed Electro-Magnetic Frequency (PEMF) Today**

Continuing scientific research in the U.S. and the world over is providing invaluable data on how magnetic fields affect the nervous and circulatory systems, as *well as every living cell - animal, human and plant.*

William Pawluk, MD, MSc and Jiri Jerabek, MD, PhD have published an outstanding book called ‘Magnetic Therapy in Eastern Europe: A Review of 30 Years of Research’. They report on dozens of

medical conditions successfully treated with both static (permanent) and frequency (pulsed) fields, including details on field strength, frequency and duration of application and summaries of actual results. This is a must-have for any practitioner interested in employing magnetic therapy in their practice.

Pulsed Electro-Magnetic Field (PEMF) Therapy received FDA clearance in 1982 to promote the healing of bone fractures and is in the process of being cleared for many more uses. Today PEMF has a proven track record in treating many more of the conditions we encounter today, including incontinence, diabetic neuropathy, muscle weakness, impaired bone health and vascular issues including gangrene where scheduled amputations are no longer needed. The U.S. company that makes the PEMF device (PMT-100AT) that I treat with and use personally on a daily basis, has literally given me a new back! After more than 20 years of chronic back pain and problems, I can now move around and stand up straight without pain! (Go to [www.pemf.us/info](http://www.pemf.us/info) to view more amazing testimonials on Autism, Parkinson's, MS, ALS, etc.).

### **Why You Seldom Get Heart Cancer**

Considering all the places someone can get cancer, makes you wonder, why don't we ever get heart cancer? One interesting theory is the heart is the most electrical organ in the human body. The heart cells have a voltage of 120 mV and, in some cases, slightly higher. This is almost twice the voltage of some of the other cells in the average person.

Pulsed Electro-magnetic Frequency (PEMF) acts as a "whole-body battery charger" by recharging EACH of the 70 trillions cells in your body. Though it's impossible to charge your cells as high as the heart, we can raise the voltage of the cells in your body up 70 mV or to 110 mV in the case of high-activity athletes. In most average people you can expect to get between 70 mV to 90 mV. PEMF acts like a spark, ignition, or impulse that keeps the cells charged at an ideal voltage. Just like a car, the human body needs fuel, oxygen and ignition, a spark-plug. Within the human body that spark is pulsed magnetic fields. All metabolic processes are driven by this cellular charge: ATP production, oxygen, nutrient absorption, waste removal, defense, reproduction.

When your cells are sick, they lose energy. As a result there is not enough ATP, and the voltage of your cells drops down to 40-50 mV. People who are sick potentially have voltages as low as 20mV (in the case of cancer). Cancer cells typically have a voltage of 20mV and are in fermentation, meaning they need ten times (10x) more energy from the environment. PEMF builds up energy within your cells; it oxygenates and alkalizes the cells. PEMF improves circulation so the conversion of nutrients and oxygen inside the body can occur at optimum performance. PEMF increases the efficiency with which your body processes and expels waste matter and keeps your system running smoothly.

Physics is rapidly becoming mainstream medicine now being used in treating Glioblastoma with electricity. A new PEMF type device called the NeuroStar® is now being used at UCLA and Stanford, employing what they are calling 'transcranial magnetic stimulation' (TMS) therapy. The NeuroStar® has FDA approval for treatment-resistant depression and it is showing remarkable results. Using a highly focused pulsed magnetic field to stimulate nerve cells in the area of the brain thought to control mood, medical experts believe that PEMF treatment is turning on stem cell production and helping to regenerate and rewire the brain.

The FDA approval of the Neurostar® and similar PEMF devices are just the beginning of a new

understanding of the integral relationship between biology and physics, which I predict will lead to many more exciting developments in the field of Energy Medicine in the future.

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### **Benefits of Pulsed Electro-Magnetic Field (“PEMF”) Therapy**

- Reduced pain
- Reduced inflammation
- Increased range of motion
- Faster functional recovery
- Reduced muscle loss after surgery
- Increased tensile strength in ligaments
- Faster healing of skin wounds
- Enhanced capillary formation
- Accelerated nerve regeneration
- Reduced tissue necrosis

Many benefits of Pulsed Electro-Magnetic Field (“PEMF”) therapy have been demonstrated through more than 2,000 University level, double-blind, medical studies done in many countries with many different PEMF therapy devices. Some of the positive effects of PEMF therapy were well established by the mid 1900’s. The first commercially produced low power PEMF devices entered the market in the early 1900s. These were used for studies and experimentation in healing and cellular wellness. They were sold to both consumers and as medical devices to doctors. The first commercially produced high power PEMF devices entered the market around 1975. They focused on the health of bones, muscles, nerves, tendons, ligaments and cartilage, on reducing pain and on cellular and tissue regeneration.

Medical PEMF therapy has been accepted in many countries around the world. The US FDA accepted the use of PEMF devices in the healing of non-union bone fractures in 1979, urinary incontinence and muscle stimulation in 1998, and depression and anxiety in 2006. Israel has accepted the use of PEMF devices for migraine headaches. Canada has accepted PEMF devices for many uses. The European Union has many acceptances for the use of PEMF therapy in many areas including healing and recovery from trauma, degeneration and the treatment of the pain associated with these conditions.

Clinical evidence shows that PEMF therapy reduces pain associated with trauma from accidents, sports injuries, surgeries and burns as well as from disease and degeneration. PEMF therapy improves these conditions in many different concurrent ways including mechanical, chemical, electrical and magnetic processes within the cells of the body.

### **Differences in PEMF Therapy Devices**

#### **• Power Level**

The magnetic energy produced by the various PEMF devices can be as little as that of the Earth’s magnetic field to more than 10,000 times as powerful. The lower power devices are generally used for cellular health and bone healing. The higher power devices are generally used for recovery of

trauma from accidents, sports injuries and surgery, as well as for control and improvement of degenerative diseases. Both low power and high power devices help reduce pain, but the higher power devices are more effective in doing so.

- **Continuous or Pulsed Waveform**

Although there are exceptions in both types, most low power PEMF devices have a continuous waveform while most high power PEMF devices have a pulsed waveform.

- **Shape of Waveform**

The continuous waveform PEMF devices can produce a square, a saw tooth, a sine or a custom waveform. The pulsed output PEMF devices usually produce a biphasic short duration pulse.

- **Control of Frequency**

Many low power PEMF devices have preset frequencies to choose from according to the various manufacturers' individual theories. Most high power PEMF devices have a user variable control of the frequency.

- **Duration of Treatment**

Depending on the power level of the PEMF device, the treatment duration can be from three minutes to hours.

### **PEMF Therapy Blocks Pain**

PEMF therapy has shown to be effective at reducing pain both in the short-term and in the long-term. The ways by which PEMF therapy relieves pain include pain blocking, decreased inflammation, increased cellular flexibility, increased blood and fluids circulation, and increased tissue oxygenation.

The trans-membrane potential, ("TMP") is the voltage difference (or electrical potential difference) between the interior and exterior of a cell. An electrochemical gradient results from a spatial variation of both an electrical potential and a chemical concentration across a membrane. Both components are often due to ion gradients, particularly proton gradients, and the result is a type of potential energy available for cellular metabolism. This can be calculated as a thermodynamic measure, an electrochemical potential that combines the concepts of energy stored in the form of chemical potential, which accounts for an ion's concentration gradient across a cellular membrane, and electrostatics, which accounts for an ion's tendency to move relative to the TMP.

Differences in concentration of ions on opposite sides of a cellular membrane produce the TMP. The largest contributions usually come from sodium ( $\text{Na}^+$ ) and chloride ( $\text{Cl}^-$ ) ions which have high concentrations in the extracellular region, and potassium ( $\text{K}^+$ ) ions, which along with large protein anions have high concentrations in the intracellular region. Opening or closing of ion channels for ion transport ( $\text{Na}^+$ ,  $\text{Ca}^{2+}$ ,  $\text{K}^+$ ,  $\text{Cl}^-$ ) in and out of cells at one point in the membrane produces a local change in the TMP, which causes an electric current to flow rapidly to other points in the membrane that occurs with the movement of electrons.

### **PEMF Therapy Reduces Inflammation**

Several factors may contribute to inflammation including injury, tissue damage, a poor localized circulation with the formation of edema. Inflammation causes pain. Swelling and bruising is an inflammation and discoloration of soft tissue caused by an impact injury or trauma. It can also result from surgery.

Tissue cells are inherently like tiny electrically charged machines. When a cell is traumatized, the cell's electrical charge is diminished; this causes normal cell functions and operations to shut down. Cells that are scarred or fibrotic with adhesions have a TMP charge of approximately -15 mV, degenerative or immune-compromised cells average -30 mV, both low TMPs. With the raised TMP, the body releases chemical signals that cause inflammation swelling and bruising resulting in pain and inhibiting the cell communication pathways necessary for healing to begin. Numerous clinical studies have demonstrated that PEMF therapy has been successful in reducing inflammation. PEMF therapy treats the cellular source of swelling by recharging the cells with a mild electromagnetic current. This stops the release of pain and inflammatory mediators, reduces inflammatory fluids and allows an increase in blood flow, therefore increased oxygen intake, to help the cells heal faster with less swelling, pain and bruising.

The effect of wound healing electromagnetic fields on inflammatory cytokine gene expression in rats was studied by Jasti *et al.* in 2001 who state: "*Inflammation is characterized by massive infiltration of T lymphocytes, neutrophils and macrophages into the damaged tissue. These inflammatory cells produce a variety of cytokines, which are the cellular regulators of inflammation*". In a study on Low Frequency PEMF—a viable alternative therapy for arthritis published in 2009, Ganesan *et al.* (Department of Biotechnology, Chennai, India) declare: "*PEMF for arthritis cure has conclusively shown that PEMF not only alleviates the pain in the arthritis condition but it also affords chondroprotection, exerts anti-inflammatory action and helps in bone remodeling, and this could be developed as a viable alternative for arthritis therapy*".

Damaged cells are also energy deficient; thus they have low oxygen levels, high in sodium levels, and have a faltered electrochemical gradient. By inducing a mild electrical current into damaged cells, PEMF therapy slows or stops the release of pain and inflammatory mediators, increases blood flow, and re-establishes normal cell interaction. PEMF stimulates and restores the electrochemical gradient, the cell starts pumping sodium out, potassium enters the cell, the swelling resolves, oxygen starts flowing back in, and pain improves. Due to the density of the cell tissue, change requires stronger pulsed magnetic fields to be able to restore the healthy TMP to its optimal -70 mV.

Several factors influence tissue inflammation and the processes by which PEMF therapy operates to reduce inflammation include complex mechanical, chemical, electrical and magnetic processes along with increased circulation, oxygenation and cellular activity. With reduced inflammation, pain decreases and faster tissue healing occurs.

It is clear that PEMF treatment stimulates many aspects of cellular metabolism and activity by increasing the TMP and flow of ions across the cell membrane, growth factors, tissue repair and healing. PEMF therapy increases blood circulation in and around damaged tissue, and effectively helps damaged cells heal by bringing more oxygen into the cells. Effects that are observed when the TMP is increased include: enhanced cellular energy (ATP) production, increased oxygen uptake, changes in entry of calcium, movement of sodium out of the cell, movement of potassium into the cell, changes in enzyme and biochemical activity, and changes in cellular pH will stimulate large amounts of lymphatic vessels to pump and drain lymph fluid which, in turn, supports immune health.

Beyond its complex mechanisms, PEMF therapy offers many health benefits. PEMFs help the natural body healing processes by delivering a non-invasive form of repetitive electrical stimulation that



requires no direct contact with the skin surface. Magnetic fields have been shown to affect biologic processes and be effective in a wide range of medical conditions. PEMF therapy has proven beneficial in stimulating cellular metabolism, blood and fluids circulation, tissue regeneration and immune system response. Through these processes, cells are able to function better and tissues repair themselves more efficiently. Through the same processes, vital organs such as the liver, kidneys and colon are able to rid themselves of impurities thus detoxifying the body and allowing better organ functionality.

PEMF treatment is effective at increasing bone formation and bone density, healing fractures and osteotomies, recovery from wounds and trauma, graft and post-surgical behavior, recovery from myocardial and brain ischemia (heart attack and stroke), tendonitis, osteoarthritis, and impaired neural function or spasticity from central nervous system diseases such as multiple sclerosis and spinal cord damage. PEMF stimulation offers a safer and more comfortable alternative for urinary incontinence to prior treatments. PEMF therapy improves sports performance, and simply helps to maintain good health.

I have personally experienced a dramatic improvement in my health, as a result of my learning to put the PHYSICS back in PHYSICIAN and I invite you to be part of these dramatic breakthroughs in health care using PEMF and other energy medicine therapies.

To read the complete 20-page in-depth report about all the benefits and treatment applications of PEMF, go to the Gordon Research Institute website at [www.gordonresearch.com/PEMF](http://www.gordonresearch.com/PEMF)

Watch my webinars on [www.gordonresearch.com](http://www.gordonresearch.com) on PEMF, TESLA and magnetic healing to learn how earth changes and the rapid decline of the earth's magnetic field, have made the addition of these modalities essential for meaningful healing today.

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### Website Resources and References:

Dr. Garry Gordon – Gordon Research Institute <http://www.gordonresearch.com>

PEMF US <http://www.pemf.us/>

Dr. Pawluk Magnetic Fields and Health <http://www.drpawluk.com/>

Magnetico Sleep Pads <http://magneticosleep.com/>

Pulsed Electro Magnetic Frequency Therapy <http://www.pemfinfo.com/>

PEMF The Fifth Element <http://www.pemft.net/the-5th-element.html>