TUNING ELEMENT™

MODE OF ACTION OF TUNING ELEMENT

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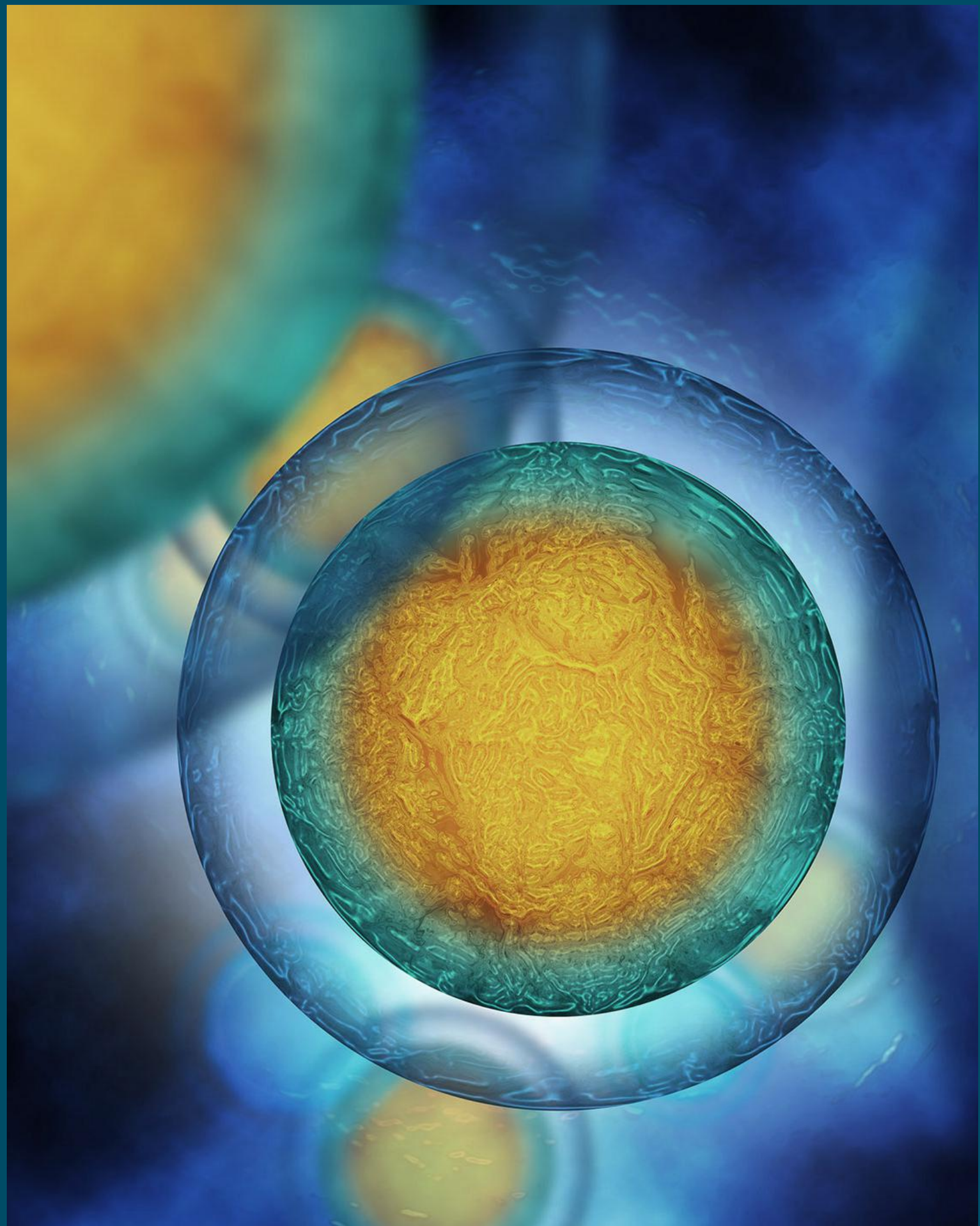

Mode of Action

ABSTRACT

- **Abstract—Tuning Element 5 Minute Relief Patches (TERP) are Silicon base, infused with Titanium Salt and imprinted with Extremely Low Electromagnetic Frequency (ELEF). TERP have been developed by Tuning Element LLC. Anecdotal reports and testimonials have shown that TERP are beneficial in pain management. TERP have been researched by Professor Durham at MSU: the research has found that TERP are not harmful, and may enhance wound healing. TERP have been analyzed by Professor Cosic and found to be acting similar as toxin based pain killers and without side effects.**

INTRODUCTION

It is time to revisit a paradigm of a biochemical approach to pathophysiology and pharmacology. Initial pathological processes occur on a quantum-molecular level, but are not addressed by the current bio-chemical paradigm. Utilizing a pharmacological approach to treat pathophysiological changes already in progress is time-consuming, costly and laden with side-effects. With the development of quantum physics, a new possibility to consider pathophysiology has emerged. Quantum Biophysics gave birth to Quantum Evidence-Based Medicine and Nanobiotechnology in the last century. This approach concentrates on nonbiological changes that occur on a quantum level in the human body prior to any biochemical changes. Many research projects have been underway in this field, especially at Tuning Element Research and Development Department, as well as at leading universities in the U. S. A. and abroad. To quote May Wan-Ho: the Human body is “quantum molecular machines.”16

In the last decade, a new class of health-related products has been developed: this new class utilizes Extremely Low Electromagnetic Frequencies (ELEMF). The frequencies in these items are imprinted with an energetic message, which is passively transmitted through skin contact. This type of imprinting technology is not new. Presently this technology is used every day in electronics by imprinting microchips with different frequencies. Tuning Element, L.L.C. is pioneering in production of passive ELEMF items that are presently available and sold over the counter (OTC) to support health and wellbeing.*

Tuning Element 5 Minute Relief Patches (TERP) are non-invasive and permanently attuned with ELEMF. TERP patches should be applied to discomfort areas of the body. Lasting from a few days to about a week, they don't fall off and cannot be felt by the wearer. They can be worn in water; so, taking a bath or shower, or going swimming, will not damage them. The patches work strictly by sending vibrational information to the body. These patches contain frequencies for support of pain management. TERP mode of action was elegantly described in a published scientific article in the peer-reviewed journal IEEE Transactions on NanoBiosciense.18

TERP have been used as post surgical, menstrual and general support pain management in clinics for the last 4 years with great success. TERP use no medications, herbals or supplements. They do not require electrical supply. They should be considered as a passive energy product. TERP are available OTC in selected health food stores and pharmacies in the U. S. A. and abroad.

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TERP technology was developed in 2010. TERP are silicon-based Titanium Salt infused adhesive patches, 4x4 cm in area. They have no additives. They have removable plastic covers and paper backings. TERP imbedded with ELEMF are harmless. TERP last 3 to 7 days, and wear off naturally. In line with many anecdotal reports and testimonials, Tuning Element, L.L.C. optioned to pursue meaningful research data to support its claim.

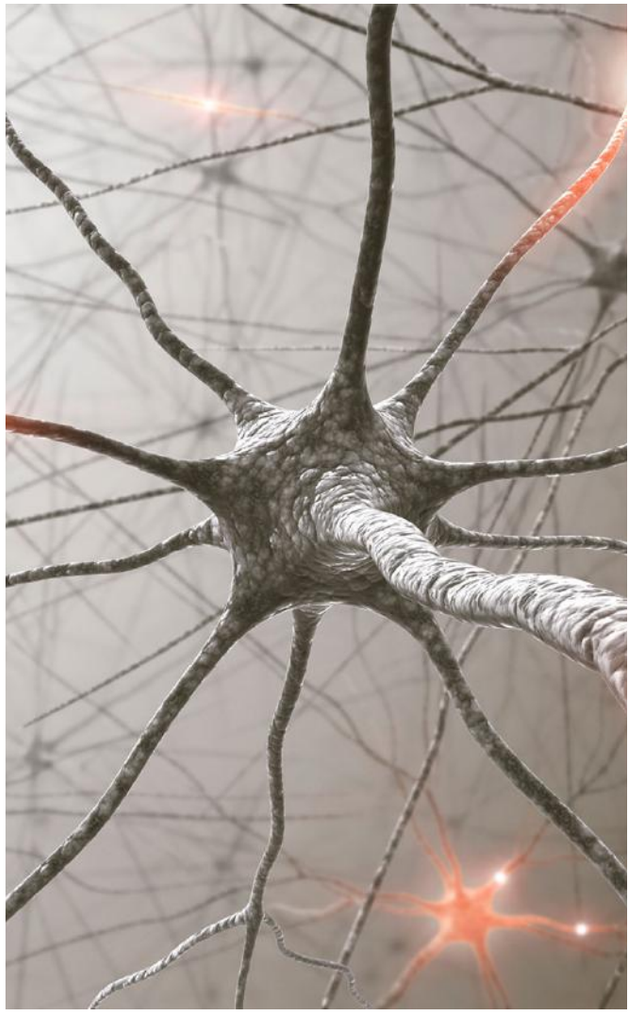
Professor Irena Cosic, Ph.D. (Author of over 280 peer-review publications in frequency and related subjects) and Director of AMALNA Company, completed a research project studying TERP. Dr. Cosic writes:18

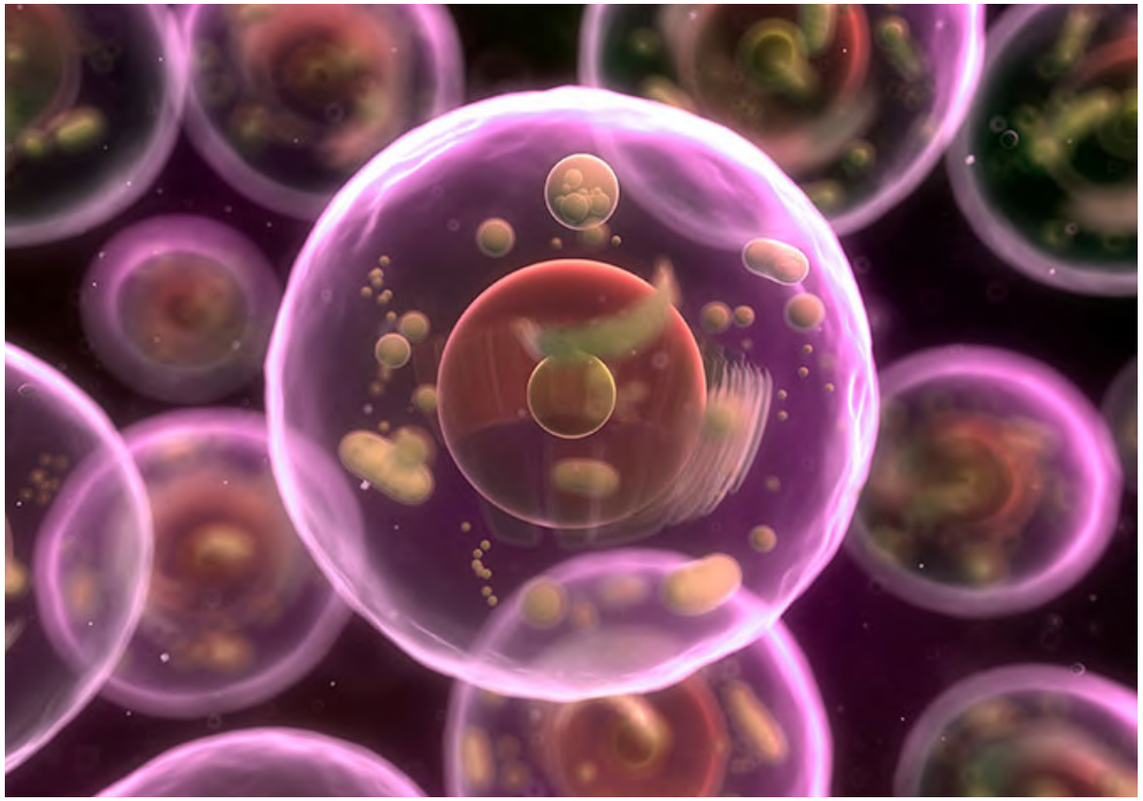
"Conclusions from Studies on Tuning Element 5 Minute Relief Patches' (TERP) Influence on Pain Through Ion Channels as Predicted by the Resonant Recognition Model (RRM)

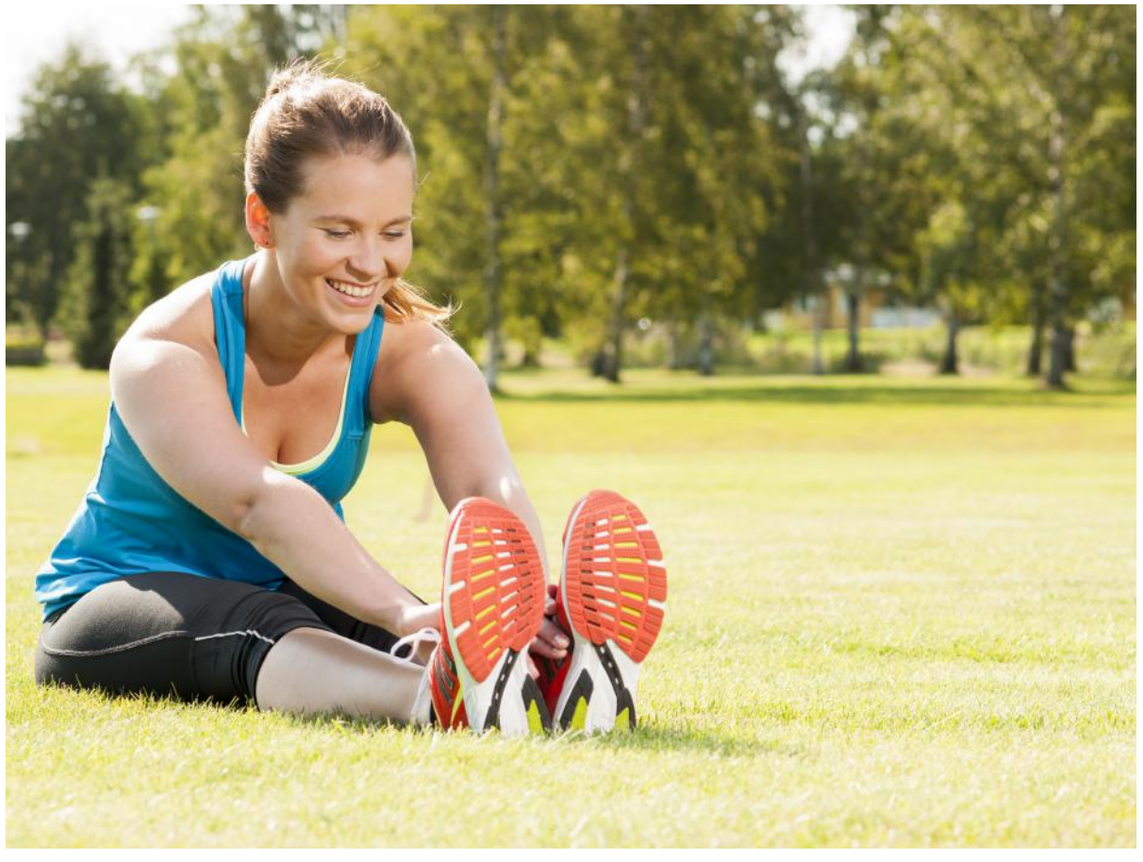
Within this study, we have analyzed pain related sodium and calcium ion channels, using the RRM model, with the aim to find the characteristic resonant frequencies for opening and closing of these ion channels and to investigate possibility of these frequencies to resonate with frequencies imprinted within 5MRP patches and consequently to propose mechanisms of pain remediation with 5MRP patches.

Characteristic frequency for pain related sodium ion channel opening and closing function is fn1=0.1465. This numerical RRM frequency relates to electromagnetic wavelength λ=1372nm. Thus, Titanium, Gold or any other conductive particles in the TERP patches, that are in a diameter of about Dλ=1400nm, Dλ/2=700nm and Dλ/4=350nm, can resonate with pain related sodium ion channels, influence their opening and closing function and consequently influence pain transmission along the nerve (axon). Characteristic frequency for pain related calcium ion channel opening and closing function is fc2=0.1021. This numerical RRM frequency relates to electromagnetic wavelength λ=1968nm. Thus, Titanium, Gold or any other conductive particles in the TERP patches, that are in diameter of about Dλ=2000nm, Dλ/2=1000nm and Dλ/4=500nm, can resonate with pain related calcium ion channels, influence their opening and closing function and consequently influence pain transmission along the nerve (axon).18

When different modalities of charge transfer through protein backbone is introduced, the resonant frequencies for the opening and closing function of pain related sodium and calcium ion channels could then be in different frequency ranges including THz, GHz, MHz and KHz. These frequencies could also resonate with the frequency imprinted within TERP patches. Results from our study can explain







mechanisms of TERP patches remediating pain through resonances with pain related ion channels. This would mean that TERP patches could mimic the similar activity as toxin based painkillers, but without side effects and particularly avoiding negative drug effects on the digestive system."18

Missouri State University (MSU) Center for Biomedical and Life Science under Director, Professor of Cell and Developmental Biology, Paul. L. Durham, Ph.D., completed the phase 1, double-blind study on experimental hairless rats. This study concluded in 2015 that TERP are harmless, and may enhance surgical wound healing. The phase 2 study for determining efficacy of TERP in pain management is underway at the same university utilizing a double-blind, cross over study of 50 patients affected with pain. The phase 2 study has simultaneously been underway in two medical clinics on adjunct and support of postoperative pain management. The study is extremely promising so far.

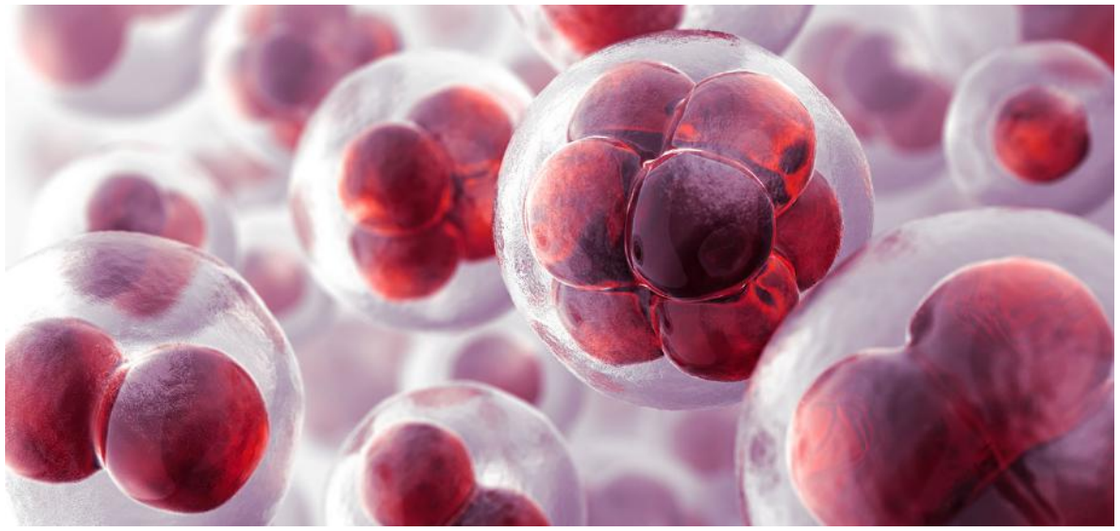
Over 200 patients were treated in clinics with adjunct, supportive treatment of post-surgical pain, menstrual cramps and a cascade of different painful disorders, with great success using TERP. Postsurgical patients used a minimal number of prescribed opioids tablets (best answer to opioid crisis), returned to work in one half of usual time and scaring of postsurgical wounds was minimal.

Pain is a major cause of suffering in the general population and has a major impact on in the economy. Health economists from John Hopkins University, writing in The Journal of Pain, reported the annual cost of acute and chronic pain is as high as $635 billion a year, which is more than the yearly costs for cancer, heart disease and diabetes.1

What Thomas Huxley stated about 150 years ago, rings true today: "every living cell is consisted of protoplasm which is the physical basis of life."2 The supportive Extremely Low Electromagnetic Frequencies (ELEMF) emitted by TERP provide the correct frequency information and promote healthy protoplasm with high energy and low entropy in the cell resting living state.12 The frequencies in these items are imprinted with an energetic message, which is passively transmitted, producing a bioenergy field when in contact

with skin. The bioenergy field is a conglomerate of particle matter fields. (electron constituents matter field, quark matter field, neutrino matter field and so on.) They interreact with each other not directly, but by interreacting with intermediary force fields such as quantum electromagnetic fields, the physical aspect of which we call photon and in this case a biophoton. Biophoton induced3 energy is coherent and nonlinear. Internally this electromagnetism is created by quantum fields of atomic action in the protoplasm caused by the piezoelectric capacity of connective tissue. 4 In fact, in the quantum physics Standard Model Theory, all the known types of matter and forces are described as quantum fields.

In humans, internal frequencies merge with material, external energy to form a Human Bioenergy Field.5 This can be studied scientifically with the advent of objective monitoring instruments: the Egely Wheel, the Electronic Muscle Tester, Galvanic Skin Response instruments6 and Bio-Well cameras.7 Biological systems possess the ability to create and utilize coherent oscillation and respond to external oscillation.8 Applications of certain frequencies by frequency generating devices such as TERP produces electromagnetic resonance within cellular structures. This change in water molecules will affect the configurations and liquid crystal properties of peptides, proteins, cell membranes, organelle membranes and DNA9 to respond in this case to pain stimuli, thus facilitating pain modulation. This was scientifically measured using Resonant Recognition Model (RRM).18 "Resonant Recognition Model can be used as universal tool in predicting protein, RNA and DNA electromagnetic resonances in the wide frequency range. Keeping in mind that earlier predictions with tubulin molecules have been experimentally proved, the RRM could be used as a powerful universal method for predicting the electromagnetic resonances in biological macromolecules that could be used in experimental planning and in conjunction with experiments to minimize time and expenditure in exploring such complex macromolecular systems."10,11 The human body is a complex living system with a number of different chemical, electrical and mechanical processes running simultaneously and continuously. All those processes depend on healthy protoplasm whose normal function depends on structured water molecules. In Ling's Association-Induction (AI) hypothesis the minimal unit of living matter is not the living cell but its building block, the protoplasm. Weak modulation of Hertzian Energy activates selective absorption of K+ over Na+ and allows ATP in the cell when exposed to ELEMF to resonate, activating RNA and DNA, restoring normal homeostasis.12 Stochastic resonance



enables this action.13 Water molecules are the base of protoplasm in cells and connective tissue. Exposed to ELEMF those molecules are energized and build "ordered" Exclusion Zone (EZ). EZ is an unexpectedly large zone of water that forms next to many submersed materials. EZ gets its name because it excludes practically everything. The EZ contains a lot of charge, and its character differs from that of bulk water (the fourth phase of water).14 EZ requires electromagnetic energy and looks like multiple strands of pearls twisted

together.15 This structured (energized) water exposed to ELEMF resonance, maintains normal protoplasm, activating ATP, RNA and DNA, promoting its normal function,16 following the principal of AI and RRM. This is statement is based on the findings that certain periodicities within the distribution of energy of delocalized electrons along a protein molecule are critical for protein biological functions and/or interaction with their targets.17 Mai Wan-Ho stats: "Water is central to the action of quantum molecular machines…Water is the means, medium and message of life."16

TERP are site specific and should be applied to the skin. Skin behaves as a capacitor. TERP are charged with dozens of different ELEMF specific to act as pain related ion channels.

We believe that technology using ELEMF and the same principle of action is opening doors to a wide variety of new products, with different frequencies and applications, in promoting health and wellbeing. Our research department has developed a number of different frequencies that are beneficial to wellbeing. You may see in the near future patches that will be supportive in behavioral patterns as well as patches for hormonal support. Those products will be affordable, without side effects, free of medication, and totally harmless.

CONCLUSION

ELEMF acts on living biological matter and creates communication between bio-molecules, which is essential to life. Molecules communicate like a radio set that receives a specific waveform carried from the radio station to which it is tuned to resonate and none other. This molecular communication takes place through structured water molecules that surround all biological molecules. It appears from the latest research that water has an amplifying role. Some of the data implies that signals are emitted by bio-molecules but finally conveyed by water molecules. It is like a string of a guitar: the string vibrates and produces a musical note, but the guitar body amplifies it to audible sound.

The future of medicine, the future of the health of humanity is in understanding the mode of action of Quantum Medicine and the entire electromagnetic spectrum of our surroundings and our interaction with it. At that point, our understanding of pathophysiology will be complete; medical books will be rewritten; preventive medicine will be 90% of medical practice, and at that point Tuning Element will be in the front row of research and development companies in Nanobiotechnology.

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* These statements have not been evaluated by the Food and Drug Administration.

This product is not intended to diagnose, treat, cure, or prevent any disease.