

# Can Immunity be Digitally Guided to Defeat COVID-19 and Future Pandemics?

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## Abstract :

The presented method is based on microbiology and the physics of organisms and water models successful paradigms that integrate disparate compartments of synergistic knowledge for solving problems. It supports a notion in water science that physics of water may create tomorrow's "wonder drugs [1]." The presented patient-centered pilot studies suggest that water programmed with rudimentary electromagnetic fields of allegedly SARS-CoV-2 and variants have produced vaccine-like prophylactic and therapeutic effects. The FDA recognized the homeopathic method of a substance's serial dilutions and mechanical agitations such as infected bodily fluids or a microbial culture. However, this water programming can also be produced through a field imprinting device. Consequently, the water media carries and delivers to the recipient's immune system complete information of the programmed microbe in the way of its molecular field-signal. Research in physics and immunology has confirmed that the human body is ontologically conditioned to respond to energetic signals since its physiology fundamentally represents a bioenergetic system. This creates a significant opportunity for the speedy preparation of highly specific, effective, and safe energetic vaccines. While a private practice setting restricts rigorous testing conditions, the reported clinical cases, scientific research, plausible mechanisms, and the absence of scientific conflicts dictate further probing of this method. The fact that just before this pandemic virologists recommended energetic influenza vaccines as the "ideal choice," in the NIH-sponsored study for pandemics with unavailable pharmaceutical vaccines, reinforces this simple, novel approach. Since most of the presented scientific evidence in this article is not based on the main multi-symptom or totality approach of homeopathy, but contemporary microbiology, infectious diseases, and immunology, physicians and researchers can readily test this paradigm in their practices. The factors for its surprising obscurity are also presented.

**Keywords :** energetic COVID-19 vaccine; digital medicine; immunology; integrative medicine; homeopathy; biodefense; bioterrorism

## Abbreviation

**CD** – compact disc, **COPD** – chronic obstructive pulmonary disease, **EFVS** – energetic flu viral strains, **EVS** – energetic viral strain, **FDA** – Food & Drug Administration, **HHS** – Health and Human Services, **MDCK** – Madin-Darby Canine Kidney, **NIH** – National Institute of Health, **PFK-1** – Phosphofructokinase-1, **QFT** – quantum field theory, **TNF-a** – Tumor Necrosis Factor-a, **VAERS** – Vaccine Adverse Effects Reporting System

## Introduction

The recent pandemics of SARS-1, bird and swine flus, as well as the Ebola virus, have reflected the known shortcomings of vaccinology in providing timely production of vaccines for public protection. These involve the time-consuming development and production, testing on animals and humans, all the while influenza viruses tend to mutate and even undergo a change in the vaccine's preparation media which may compromise the vaccine's efficacy. These factors undermine the ability of pharmaceutical vaccinology to promptly deliver public protection in sudden pandemics, bioterrorism, or controlling variants. Also, the antiviral drugs yield suboptimal efficacy, particularly against SARS-CoV-2 and variants. By the time vaccines were produced in this crisis,

hundreds of thousands of deaths had occurred in the US and millions, worldwide. A computer model concurs with the impossibility for vaccines to keep up with the transmission of vaccine-resistant strains, unless vaccinations are administered within a short period, across the globe [2]. Additionally, current SARS-CoV-2 vaccines, based on the NIH and VAERS data, confirm that the serious iatrogenicity of vaccines occurred in periods of production pressure [3]. There were fifty-seven times more serious adverse events and 123 times as many deaths that occurred in one year than twice the number of administered influenza vaccines over three years [4]. The FDA has assigned warnings to Pfizer and Moderna vaccines for myocarditis complications that were documented in the young military, and Johnson and Johnson vaccine for thromboembolism, with the serious concerns raised over their overall safety [5-8]. The initial benefits of these vaccines result in a reduction in hospitalizations, deaths, and contagiousness, significantly reduced by the variants. Recent studies indicate an even higher incidence of the infection among 68 countries and most of the US with the highest vaccination rates [9-11]. Some immunologists blamed it on a bioengineered virus or the low specificity

of vaccines leading to mutations. On December 28, 2021, the US registered a daily record of 400,000 COVID cases, with the January 2022 rate remaining high in the US and Europe.

The catastrophic toll of this pandemic, due to vaccinology’s deficiencies, prompted President Biden’s Executive Order of January 2021, and the US HHS Secretary, Xavier Becerra’s statement to seek “transformative technology that can be easily manufactured, distributed and administered both domestically and internationally.” The need is also compounded by the expectations of more lethal infections in the future, due to progressing gain-of-function research that likely created SARS-CoV-2 and concerns over an accidental escape of aggressive microorganisms in the lab [12-13]. All of these factors prompt a reexamination of a cardinal rule of science in solving problems, by implementing the already known capable means, such as based on physics, for speedy production of effective and safe vaccines. These may also gain sufficient time to test pharmaceutical vaccines.

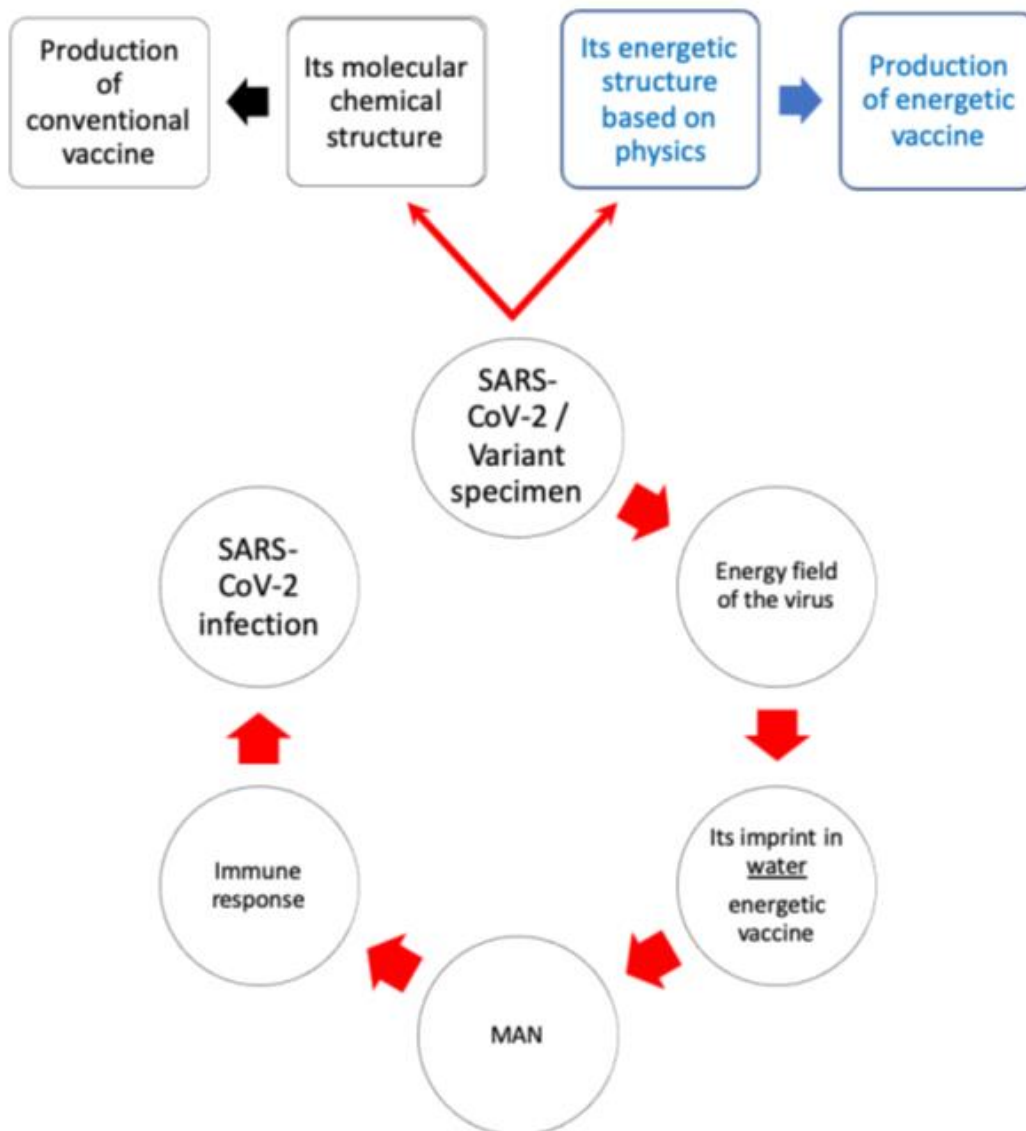


Figure 1: The scientific premise of the proposed paradigm

Figure 1 reflects the ontological basis for energetic vaccines and therapeutics that, based on the matter-energy duality of physics, the energetic domain is fundamental to all of the three main components for turning water into a programmed energetic vaccine. These are the molecular energy field of microbe, whether SARS CoV-2, or variants, water that records it, and the responder to the recorded molecular signal, human.

All living, including microorganisms and human cells, besides their more familiar molecular-chemical structure and properties also possess electric, electromagnetic, magnetic, and electronic ones. Scientific disciplines: quantum biology, magnetobiology, bioelectronics, magneto-chemistry, bio-electrochemistry, and biophysics well-reflect this concept. Physicists, including Nobel laureates, Niels Bohr, Werner Heisenberg, Eugene Wigner, Erwin Schrödinger, and Roger Penrose supported physics and quantum phenomena playing a fundamental role in the visible, macroscopic molecular processes in the living [14]. Nobel laureate in physics, Brian Josephson, and Nobelists in medicine, Albert Szent-Györgyi and Luc Montagnier either validated programmed water or commented on the importance of physics of water and organisms in biology and medicine. French immunologist, Professor Jacques Benveniste MD, who first registered the immune response to programmed memory of water, named this paradigm digital biology [15].

#### Signal source, microbes

Microbes, including viruses, as all matter in nature, possess and communicate through electromagnetic and magnetic fields of their subatomic particles, atoms, molecules, and chemical bonds [16-20]. They also possess magnetites. Corona, like all viruses, contains metal ions with paramagnetic properties, which are bound to proteins, representing molecular information [21].

Additionally, another fundamental property, natural resonant frequency, is also substance-specific that can serve as the basis of programmed vaccinology. The natural resonant frequency of the brain cells was already proposed for a new diagnostic method [22]. Based on this phenomenon, several researchers have produced evidence of the destruction of viruses, such as HIV and Influenza A, through generating the appropriate resonant waves, without thermal effects [23-24].

Since viral mutations, such as SARS-CoV-2, with the corresponding change in their resonant frequency, can be readily absorbed by water it was proposed to create the library of non-chemical, microbial bio-frequency signatures in water samples, parallel to their molecular genomes [25].

#### Signal recorder, water

The very evolution of Earth and life supports water as a versatile liquid CD (compact disc). According to physics life has evolved through natural electromagnetic radiation, cosmic first, then aquatic and then earth's [26-27]. QFT underscored the role of coherence and molecular oscillatory communications in the living, relegating a major role in the effects to water [28-29]. It is the dominant constituent of proteins, cell membranes, and cytoskeleton, with the prominent electromagnetic and recording properties of its interfacial layer, exclusion zone [1]. Water's permittivity is also owed to its minerals and trace elements which are metalloid electromagnetic conductors. Its informational capacity plays a major role in the biological regulation that is also supported by its colloidal, crystalline nature [30-38]. Water's role in evolution and interaction with DNA was emphasized [39].

The paramagnetic and overall, plastic properties of this media make it an ideal programmable liquid CD, by readily changing its structure and information through mechanical, electromagnetic, or magnetic impacts. This renders a unique versatility for recording and delivery of meaningful

biological information. The notion of the water-mirror approach is based on evidence of the water molecule networks behaving as a matter and energy mirror for the rest of the biological or aqueous system [40]. To underscore the water's plasticity, its structure, pH, and dissolved DNA have been altered even by human intention, with the brain being known to emit electric and magnetic fields [41]. Biochemical and biological impacts were registered following the magnetic and electromagnetic transfer of molecular information in water [42-64]. Magnetobiology and the concept of magnecules for liquids advanced informational pharmacology's notion to secure stable molecular clusters with intrinsic and external magnetic fields [65-68].

#### Water programming in medicine and its alleged controversies

The existing model of programming is represented by its oldest prototype that has established most of the scientific confirmations, the FDA-registered therapy, homeopathy. It conducts programming through manual serial dilutions and mechanical agitations or potentization of a substance. Despite homeopathy being used by 500 million people, worldwide, and having produced substantial scientific and clinical support, it continues to be grossly misrepresented and dismissed in the mainstream medical literature. The alleged reasons are homeopathy's ill-advised principle of similar, "treating poison with a poison," "overdiluted placebo remedies," "implausible or unknown mechanisms of action" and "failed statistical studies." The following refutes these falsehoods.

#### Similar

Since homeopaths represent physical signals that are often void of the original molecules, similar remedies to, or of the same cause of disease benefit by inducing more specific, protective immune and other responses in prophylaxis and treatment. Conventional medicine successfully utilizes this principle in vaccinology and allergology by using the same microbes or allergens. The principle is evolutionary conditioned, where adaptation to stressors such as elements, temperature, infections, and pollutants, over billions of years, was based on the development of the corresponding protective mechanisms to the same assaults. Homeopathic remedies, by delivering the same attenuated stressors, fast-forward adaptation from long years to hours, days, or weeks and are viewed as adaptogens. The science of hormesis confirms a similar principle and, like homeopathy, demonstrated mitigation of pathology through the same, diluted toxic substances and a registered production of protective heat shock proteins that "unequivocally supports the principle of similarity at the cellular level" [69-71]. The arthritis patients experienced relief only with homeopathic remedies whose electromagnetic frequencies were similar to these patients' serums [72]. Physics emphasized the role of resonance phenomenon in the similar principle.

#### Overdilution

Materials scientists rejected the notion that homeopathic remedies in dilutions exceeding Avogadro number constitute an overdiluted placebo as "ignorance in and distortion of science," which also dismisses the scientific importance of applied mechanical force, potentization in a production process [73]. The structure and properties of homeopathic preparations cite cluster networks, crystal growth, epitaxy, dissipative structures, ferroelectric domain, and coherence based on quantum electrodynamics and QFT of superradiance [74-77]. Solutions with these structures and properties defy the constraint of Avogadro number, and potentizations were correlated with an exponential rise in the remedies' voltage generation [78-79]. The different remedies' patterns were registered with most of the nuclear magnetic resonance and other instrumentation against the controls, and physicochemical properties of these preparations were elucidated [80-87]. Many of the cited studies concerned remedies diluted beyond the Avogadro number. Gene expressions, EEG, and immune responses, as well as the abolition of infections and cancer, were registered following the homeopathic therapeutics [88, 90-94]. A simplified manual method,

Korsakov's, exists for preparing energetic vaccines and antidotes from infected, or poisoned bodily fluids that can be also used by physicians [95]. Overall, "overdilution" claims amount to confusing physics with chemistry.

### Implausible, unknown mechanisms of action

Denying a well-confirmed phenomenon amounts to the same scientism as denying our existence because of the still unknown exact mechanism of the Big Bang. The great paradox in rejecting homeopathy and its energetic vaccines on this basis is the birth of vaccinology itself in 1796 when, despite the unknown mechanism of the smallpox vaccine and the nonexistence of immunology, the vaccine saved countless lives. "Unknown" may only apply to all of the possible, numerous mechanisms of homeopathic action, considering the immense complexity and nonlinear nature of the human body. Given the fact that both parties, the organism, and the remedies, consisting of two in the same, water and an electromagnetic media, one can only state that the interaction is inevitable, but to determine all of its components is "impracticable" [96-98]. The atmospheric model reflected the same challenges in tracing exact pathways of energetic forces acting at any exceedingly complex and nonlinear biotic system as "the possibly countless electrical interactions within biological material." [99]

Unlike pharmaceuticals, electromagnetic signals cannot be traced through radioisotopes to determine exact pathways within an organism. Nevertheless, plausible mechanisms and the results of homeopathic signals have been well-presented, listing cytokines, signal proteins, cell signaling, epigenetics, gene expressions, cell stress mediators, and neuro-endocrine-immune responses [100-102].

### Statistical studies

Most of the meta-analysis studies refuted a placebo effect of homeopathy [103].

### Signal responder, the living

The fundamental structure and properties of humans and all living lie with physics that views these as macro-quantum energetic systems that function through coherence, electromagnetic molecular signaling, and resonant communications exceeding the speed of chemical reactions by a thousand-fold and assuring the only optimal survival mode [104-113]. Magnetic elements and the physical properties of human tissues are widely used in modern medicine for common tests, ECG, EEG, MRI, and CT scans, but surprisingly not for energetic therapeutics such as programmed water or acupuncture. Besides water being capable of delivering external therapeutic signals to the body, it also represents its major internal receiving antenna for physical communications, including DNA [114-121]. The same epistemology equates the living with bio-computers due to the commonalities in conduction, storage, and processing of information, based on electromagnetism and electronics [122-132].

All of these properties deem body electromagnetic communication as the primary language that can be effectively used for therapy and diagnosis. Two hundred publications cite a response of organisms to a magnetic vacuum and define biological magnetoreception as a universal physical property [133]. A theory of ordered chaos and nonlinear stochastic resonance phenomena explain how relatively weak homeopathic, or digital signals can elicit robust biological responses [134-137].

The well-established interface between biology and physics prompted physicists to question, "Are biology and medicine only physics?" that merit prudent energetic therapeutics, such as homeopathy, acupuncture, and others [138].

### Confirming basic and clinical research of energetic water vaccines and therapeutics.

Observational studies in the past reported therapeutic success of homeopathy in the epidemics of cholera, diphtheria, malaria, meningitis, plaque, polio, scarlet fever, smallpox, and typhus. In some of these, remedies based on a totality, the similar principle was used, which caused the same symptoms in healthy volunteers.

The medical archives of London indicate the mortality rate during the cholera epidemic in 1854 as 16.4% at homeopathic hospitals versus 50% at their allopathic counterparts. Contemporary immunological studies supported the efficacy of homeopathic medicines in models of immunity and inflammation [139]. Beneficial immune responses were induced by energetic, homeopathic flu vaccines, isodes containing influenza strains, and clinical trials displayed overall 90% efficacy and a 97% safety record of homeopathic preparations in flu epidemics [140-143]. Among the registered immune markers were MDCK, TNF- $\alpha$ , and PFK-1, with the TNF- $\alpha$  known to activate various innate immune responses and provide protection against influenza [140]. The change in the immunological profile was registered in response to homeopathically programmed water [93]. One of the studies involved a double-blind placebo-controlled trial of swine flu (H3N2) isode-vaccine. This virus caused up to five million deaths worldwide and 100,000 deaths in the US in the 1968 pandemic. Since then it has dominated seasonal flu pandemics in the 21<sup>st</sup> century, causing the highest morbidity and mortality, before COVID-19. The study yielded a 30.5% flu incidence in the placebo group and only 1%, in the isode group. COPD patients have demonstrated significantly fewer upper respiratory infections when the homeopathic remedy made from duck liver, an organ of the reticuloendothelial system, was added to conventional medications, as a preventative for influenza. This was in comparison to COPD patients on medications alone [141].

A recent study for alternatives to flu vaccines, which was co-sponsored by the NIH and conducted by virologists, recommended the use of homeopathic isode-vaccines of influenza strains, as "an ideal choice" in pandemics [144]. Scientists associated with the FDA and Department of Defense issued a similar recommendation in the events of bio- or chemical terrorism [145]. In one of the largest studies in infectious diseases recently conducted by Cuban immunologists and infectious disease specialists on 2.4 million people, a leptospirosis homeopathic isode-vaccine eliminated morbidity and mortality of this serious endemic with the mortality rate up to 15%, far exceeding that of SARS-CoV-2 [146]. It was as effective as a conventional vaccine while costing ten times less and well-tolerated by children and adults. Other studies demonstrated significant preventative, or therapeutic benefits of homeopathic isopathic vaccines against tularemia, meningitis, and E. coli infections [91, 147-148].

Besides microbial cultures, the source for the energetic vaccine can be also the infected bodily fluids and tissues—autoisopathic remedies—many of which are FDA registered as legitimate drugs.

A potentized malignant autoisode, Carcinisin, produced apoptosis of cancerous cells, and a smallpox lesion that was turned into the first successful vaccine for the masses, attest also to the validity of such sources [89].

A dramatic advantage in speed, volume of production, and cost-effectiveness of programming water, due to its permittivity, was demonstrated in a controlled study where a small volume of a homeopathic preparation charged a 2,200m<sup>3</sup> lake [149].

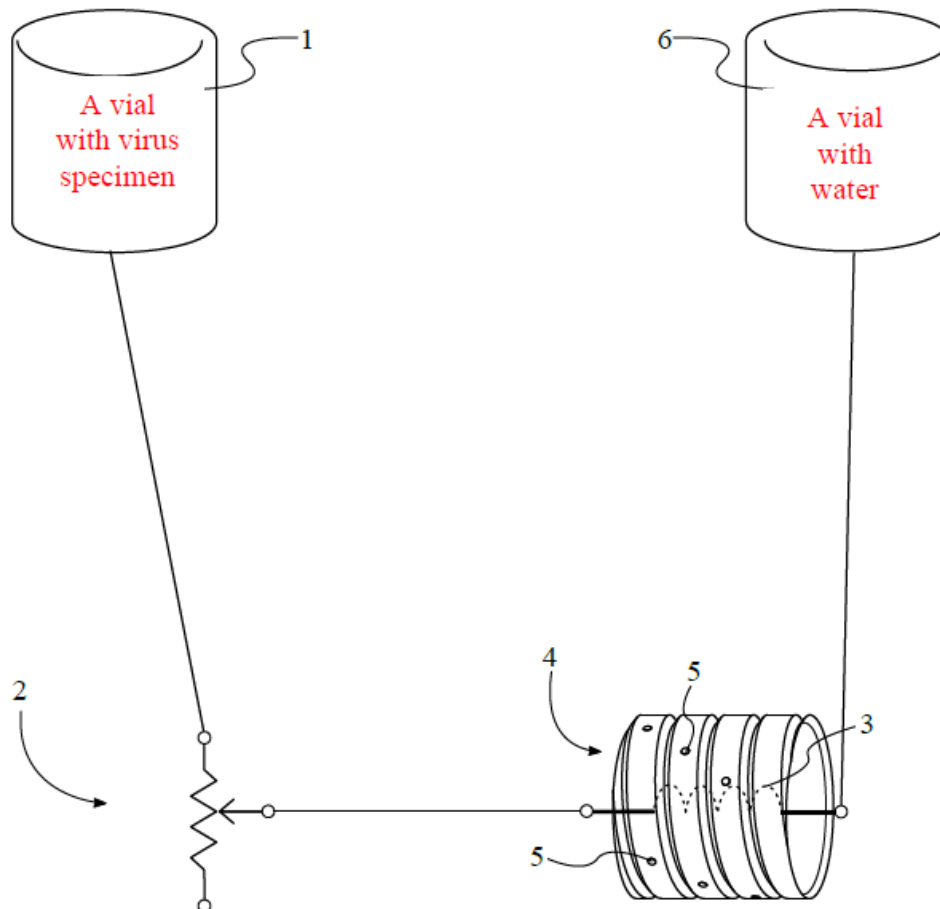
### Expeditious digital programming of water

Besides a manual method of programming water, electromagnetic and magnetic ones were validated, too. Numerous experiments, including those by Nobelist and virologist, Luc Montagnier MD, with bacteria and viruses, demonstrated biological effects of even electronically emailed information

of programmed water samples including antimicrobial, and anticancer drugs [150-171]. Scientific support for “wave vaccines” was presented by physicists, demonstrating the materialization of DNA fragments in water through electromagnetic fields [172]. The research in wave or energetic vaccines might have been more productive with proper funding. In 2015, this author sought a grant from both the NIH main office and its alternative-integrative branch to conduct a clinical trial for the Ebola virus with the energetic vaccine, only to learn that none existed for homeopathy or digital programming.

## Materials and Methods

The production of digitally programmed water for prophylactic and therapeutic applications was conducted through the Therapeutic Frequency Imprinting Device (U.S. Patent #10941061) whose housing is partly reflected in Figure 2. Spring water at room temperature was used as the media, without added preservatives or other chemicals to minimize possible untoward reactions and their confoundment in interpreting the response.



1 - an in-well, 2 - a potentiometer, 3 - a conductive coil, 4 - a shielding tube, 5 - a plurality of magnets, 6 - an out-well.

**Figure 2:** Therapeutic Frequency Imprinting Device

Bio-information and magnitude of the field that charges water coherent frequencies in out-well are carried on the magnetic vector potential component (**A**-field) of the magnetic field and can be regulated through a potentiometer knob. The generated also, magnetic **B**-field component is equivalent to a momentum impulse and has a frequency imprinting function.

In this study, a sealed glass water vial containing saliva of a patient with typical, severe symptoms of COVID-19, was placed in an in-well to imprint a sealed dropper water bottle in out-well by, likely, SARS-CoV-2 from the saliva, in assigned 60X potency. Each second of the imprinting process accounted for each X, and this preparation was identified as EVS II 60X.

The indication that saliva contained the virus was derived from a physics-based bioresonance test, from alternative medicine (applied kinesiology),

and a year later, a study recommended saliva as the most specific, 99.2%, rapid test for SARS-CoV-2 detection [173].

The patient’s symptoms in March 2020, consisted of heart palpitations, difficulty breathing, gastrointestinal pain, fever, malaise, impairment of memory, smell, and taste. She refused a COVID-19 nasopharyngeal test due to feeling too sick to drive and wait in line.

Two groups of patients received EVS II 60X for prophylactic purposes, starting in March 2020 in the US, before accessibility to vaccines. The participants were informed in writing that it was only for health enhancement and not tested by the FDA. The first group consisted of 60 patients from my practice, children to the elderly, who used the preparation for some 18 months. Group two, some fifty total, encompassed military volunteers and their families, children to middle-aged, who were monitored for seven

months. Both groups used a one drop dose under the tongue, every Monday and Thursday, until opting for a COVID-19 vaccine. Treated patients were mainly in the US, with only a few in Europe. Just the first two patients who offered written testimonials of their recoveries from COVID-19 symptoms used the energetic preparation EFVS 1M. It contained a mixture of multiple available homeopathic influenza strains that were increased to 1M potency through the device, to potentially enhance the immune response. It was deemed necessary since homeopathic companies provide limited potency ranges. This preparation was dispensed at the very onset of the pandemic in January 2020. Electronic copying of information from homeopathic remedies into the water was validated, defining these as, “homeopathic-like” [174]. Later, when EVS II was obtained, it was energetically tested and observed to be more specific for the symptoms of COVID-19 and used in 720X and 760X potencies. As variants emerged, and EVS II displayed a poor match with the energy field of afflicted patients’ bodies by bioresonance testing, newer digital preparations were programmed and used. These were EVS III that was made from a patient’s saliva who was deemed to be sick with a variant in August 2021, likely Delta, and promptly recovered from this autoisode. In the late fall, the EVS II and EVS III combination was used in higher potencies against the new variant, as suggested by bioresonance testing. Some of the patients were also given a thymus gland supplement, devoid of active substances and having no record of curing any infection, except for intended immune support.

**Results**

No cases of COVID-19 or side effects were registered in the first group for 18 months or reported COVID-19 cases in group two. Only two cases in group two reported a reaction to this preparation. In one of these, it was transient flu-like symptoms that suggested the induced immune response common to vaccines. In the other case, the individual complained of stomach pain. However, due to an unusual complaint, in my long experience of using energetic flu vaccines, I suspected an underlying chronic condition since vaccines may consume immune reserves that are necessary to contain other stressors. One of these would be a stomach infection that is commonly caused by H. Pylori bacteria. He (not my patient) confirmed my inquiry, by divulging a history of prior stomach pains and their current treatment, with the recommended H. Pylori test proving positive. He was advised to discontinue the drops and did not have any flu illness throughout the four month follow up period before receiving the Pfizer vaccine.

Twenty patients were treated for the typical COVID-19 symptoms, none from the prophylactic groups. Fifteen of these were from my practice, eight of whom had positive COVID tests. Six of the eight who retested, became negative within days, with one retested a month later. All fifteen patients completely and quickly recovered. A chiropractic doctor from Davie, Florida, reported another five patients, all with positive COVID-19 tests who promptly recovered through the EVS II 720X remedy.

A medical doctor, the former Chief Medical Officer of the NASA Space Program from Fort Collins, Colorado reported positive clinical responses to the EVS II remedy too, that recovered fifty chronic COVID patients.

Preparation	Dose & Frequency	Two Prophylactic Groups	Duration	Reported COVID-19 or Any Flu	Untoward Reactions	Residual Side Effects
EVS II 60X	One drop, twice weekly	60 patients 50 patients	18 months 7 months	None None	None Two	None None

**Table 1:** Response to energetic digital vaccines for prophylactic purposes for COVID-19

Preparation	Total Number of Cases	Dose & Frequency	Reported Outcome	Untoward Reactions	Percentage
EFVS 1M – Homeopathic-like	Two, acute	One drop, once	Complete, prompt recovery	None	100%
EVS II, EV III, EVS II and EVS III	18, acute	One drop, from one to three times	Complete, prompt recovery	None	100%
EVS II Digital	50, chronic	One drop, from one to three times	Complete recovery	None	80%

**Table 2:** Response to energetic vaccines for therapeutic purposes for COVID-19, like illnesses and variants

All of my cured patients, except children, have submitted testimonials with their names and contact information, that is available upon request. To add more objective evidence that immunity can be digitally guided, a testimonial and the supporting chest X-ray reports are also available from a cured patient from pneumonia by digital energetic vaccines and antidotes, before the pandemic. Overall in my practice, no patients with diagnosed or just COVID-19 symptoms failed to respond to this approach.

**The projected advantages of programmed water vaccines and therapeutics in pandemics.**

High specificity

This is expected through obtaining a strain-specific energy field of the actual virus from either a viral culture or infected bodily fluid.

Efficacy

It is predicated on the specificity of energetic vaccines. Some experiments support my long-term clinical observations that homeopathically and digitally programmed water are equally effective [175].

Safety and related benefits

The presented automated technology obviates any contact between a virus or infected bodily fluids with programmed water and thereby, the necessity for time-consuming virus attenuation procedures, use of other chemicals, and prolonged safety trials in vaccinology.

Scientific literature supports my clinical experience that magnetically treated programmed water suggests lasting bacteriostatic properties by being free of signs of spoilage for years, without using chemical preservatives [176-178].

The FDA and American poison control agencies have a very high safety record with homeopathic remedies [179-180].

**Versatility**

Energetic vaccines can be promptly prepared from any infectious agent, including variants, and used both prophylactically and therapeutically.

**High speed and volume of production**

Imprinting technology can produce energetic vaccines in seconds to minutes, and homeopathic production, in hours to days, in vast volumes.

**Individualized flexibility**

Energetic potency can be adjusted, if necessary, to special health needs, age, etc.

**Minimal requirements in production, storage, leading to further potential for mass distribution and administration.**

The administration is by mouth, one drop, without requiring medical personnel, special production facilities, or refrigeration. It can be produced in any environment, including rural settings, using portable technology. The quoted research indicates a potential of an instant domestic and international availability of energetic vaccines electronically, via email transfer of virus or other microbe fields.

**Costs**

These are negligible, compared to pharmaceutical vaccines and drugs, where the potential astronomical savings also include curtailed utilization of many outpatient and inpatient services. In my decades-long experience, using energetic influenza vaccines prophylactically and therapeutically, none of the treated patients used ER or hospitals.

**The potential length of provided immunity**

This is to be determined in a proper study. Higher energetic potencies suggest longer protective responses, particularly when repeated.

**FDA compliance**

It is formally met under a definition of an “energetic preparation for health enhancement purposes,” pending clinical trials. Both the American FDA, its Canadian and European counterparts have registered many homeopathic, energetic remedies of infected bodily fluids and tissues.

**The reasons for the obscurity of this paradigm**

The gigantic profits from monopolizing healthcare by the pharmaceutical industry and its enticing collaboration with medical academia, researchers, and prominent journals have led, to quote concerned medical academicians, “a commercial takeover of medical knowledge” [181-186]. The top 12 of the world’s most influential medical journals pointed to the “transformation of clinical into a commercial activity” [181]. Consequently, Harvard University economists stated that low-cost effective innovations are suppressed because “keeping patients healthy does not pay” [187]. This particularly holds for non-pharmaceutical approaches, such as homeopathy and digital medicine, to quote a prominent physicist, “frequencies cost nothing” [188]. The suppression has also affected the training of medical researchers and doctors, which is void of the physics of the living and water and their based effective and safe therapeutic and diagnostic interventions. Humanity’s health was placed in the hands of the researchers and physicians “who guess that string theory in physics has something to do with violins” [189]. For the same reason, physicists remarked that “the pioneering experiments of immunologist Jacques Benveniste left many biologists, chemists, and physicists in an unnecessarily confused state” [76]. Academicians in science education concur, that while “living things are the most complex to understand who obey the laws of chemistry and physics,” rounded science education in biology is remiss [190].

The practical toll by analogy, amounts to describing and utilizing only the chemical structure and properties of a wire, while omitting the more important, fundamental electromagnetic and electronic ones, thus metaphorically rendering even a light bulb impossible in medicine. A decision scientist, MIT physics professor Pugh warned that limited descriptions of problems commonly produce “absurd results” [191]. Consequently, despite hundreds of billions of dollars spent by the NIH on “research” over decades, its office admitted to its inability to explain the fundamentals of an organism’s functioning, or why “bench” failed to improve the quality of care at the bedside. It stated, “a lack of comprehensive understanding of the cellular and molecular states and interactive networks...” that is based on physics [192]. The interdisciplinary scientists denounced “no understanding of homeopathy and acupuncture,” by conventional medicine [193].

Consequently, physics-based interventions have been biased against because of “not fitting the box” and the “unknown is unloved” [194-195]. Three-hundred ninety-eight researchers, reviewers for a respected medical journal, concluded that a drug effect was significantly superior to a homeopathic remedy, even though the entire data, unknown to them, was equally fictitious [196]. The aforementioned Cuban study would have set a sound precedent for using energetic vaccines. Like many other high-quality homeopathic studies, however, it was denied for publication by mainstream journals without citing any scientific flaws.

Overall, independent scientists defined the current state of “scientific” medicine as one of “deliberate misinformation” and “totalitarian thought patterns” that sustain a falsehood of nonexistence of this very promising paradigm [197]. Even Nobelists are not an exception to totalitarianism. Professor Luc Montagnier had to “escape intellectual terror” and move to China to research digital medicine for viruses and bacteria.

**Limitations of these pilot studies**

These include a formally undiagnosed patient with COVID-19, whose saliva was used to prepare an energetic vaccine. Neither prophylactic nor treatment groups had controls or all of the treated patients had a formally established COVID-19 diagnosis. However, conducting a control group among the ill with a potentially fatal infection would be ethically prohibitive, particularly in the setting of a non-randomized clinical trial.

**Discussion**

Considering the presented vast supporting research and despite the defined limitations for energetic vaccines, the reported positive prophylactic and therapeutic responses outweigh the likelihood of them being merely placebo-induced. This is particularly apparent among those treated and recovered children, one of whom was autistic. The patient whose infected saliva was used for the energetic vaccine, EVS II, almost certainly had COVID-19. Her COVID illness was supported by the typical symptomology and the absence of any other officially registered epidemic at the time. The same applies to the patient whose saliva was used for the EVS III remedy. All of the patients who had recovered from COVID symptoms, including those who had positive and converted COVID tests took EVS II, EVS III, or a combination of the two.

Even assuming that the saliva carried a different virus, the aforementioned positive therapeutic responses and confirmational COVID-19 tests, still allege clinical merit even if due to a nonspecific immune response. A hypothesis that both prophylactic groups avoided the infection because of social isolation would be particularly unlikely in the military group, most of whose members continued heavy social exposure, including flying and using public airports for their assignments. Sufficient social isolation was also improbable, for as long as 18 months, in the first group. The physicians’ foremost calling, heal first, also conflicted with the study rigor by not using saliva of a just formally diagnosed COVID-19 patient, but one with the most severe and typical symptoms, to prepare a more

effective energetic vaccine, due to the expected higher viremia and virus content in the saliva. Overall, the key component in the progress of science is the significance of the observed phenomenon, however tenuous at the time, that this article attempted to expose and recommend its further study. The opposite, high rigor testing, as displayed by evidence-based medicine using an isolated, weak pharmaceutical model, has ultimately failed to improve quality care [198]. The cited reasons are the notable failure to address the complexity and integration of sciences in medicine [199-200]. The model of these pilot studies aimed to include these missing entities that yielded encouraging observations, without asserting claims. It used a common heuristic approach, based on the empirical knowledge and the physicians' experience that is widely utilized in medicine.

As understandably counterintuitive to the prevailing pharmaceutical model in medicine as energetic water vaccines are, a philosophical tool, *reductio ad absurdum*, makes just the opposite impossible that the microbes and humans are devoid of energy fields, water cannot record the latter, or humans respond to energetic signals.

## Conclusion

Both the positive prophylactic and therapeutic responses of the presented energetic vaccines along with the extensive supporting scientific evidence of this paradigm, appear to be far from coincidental. Its versatility offers the potential for prompt preparation of energetic vaccines from a variety of sources, in a pandemic with emergent viruses. Among these, a mixture of different homeopathic flu strains to induce a nonspecific immune defense. In the case of digitizing viral cultures or infected bodily fluids, the elicited immune response is expected to be more specific. The proposed clinical trials of this method should also include monitoring the immunological function to establish its capacity to be digitally guided, if it is to have broad implications for infectious diseases and immunology, overall.

The sought-after clinical trials are to determine the full potential of this novel approach in light of the still ongoing and future pandemics that costs lives. The suggested prophylactic trial groups may involve children and young adults, with the studies reporting an occurrence of vaccine-related myocarditis among them [201].

The treatment groups might encompass acute and chronic COVID-19 patients, with the latter including thousands of our healthcare colleagues who have admirably shouldered the enormous burden of this pandemic [202]. Finally, it is essential to establish the complementary benefits of pharmaceutical and energetic vaccines for creating an optimal solution for public protection.

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## Conflict of Interest

The author has a patent for the Therapeutic Frequency Imprinting Device.

## References.

1. Pollack G. The fourth phase of water: beyond solid, liquid, and vapor. Seattle: Ebner and Sons Publishers., 2013: p 17.
2. Rella S, Kulikova Y, Dermitzakis E, Kondrashov F. Rates of SARS-CoV-2 transmission and vaccination impact the fate of vaccine-resistant strains. *Sci Rep* 2021; 11(1), 15729.
3. Doshi P. Will COVID-19 vaccines save lives? Current trials aren't designed to tell us. *BMJ* 2020; m4037.

4. National Institute of Health. (2021, Dec.1). Ethics grand rounds: The ethics of vaccine mandates. Center for Information Technology.
5. Montgomery J, Ryan M, Engler R, Hoffman D, McClenathan B, Collins L, et.al. Myocarditis following immunization with mRNA COVID-19 vaccines in members of the US Military. *JAMA Cardiol* 2021; 6 (10), 1202.
6. Barda N, Dagan N, Ben-Shlomo Y, Kepten E, Waxman J, Ohana R, et.al. Safety of the BNT162b2 mRNA COVID-19 vaccine in a nationwide setting. *N Engl J Med* 2021; 385: 1078-1090.
7. Jiang H; Mei Y. SARS-CoV-2 Spike impairs DNA damage repair and inhibits V(D)J Recombination in vitro. *Viruses* 2021; 13(10): 2056.
8. Seneff S, Nigh G. Worse Than the Disease? Reviewing some possible unintended consequences of the mRNA vaccines against COVID-19. *International Journal of Vaccine Theory, Practice, and Research* 2021; 2(1): 38–79.
9. Kampf, Gunter. The epidemiological relevance of the COVID-19-vaccinated population is increasing. *Lancet* 2021; 11 100272.
10. Syal A. Hospitalizations rising among fully vaccinated in the U.S., Fauci says. (2021-11) [2022-01]
11. Subramanian SV, Kumar A. Increases in COVID-19 are unrelated to levels of vaccination across 68 countries and 2947 counties in the United States. *European Journal of Epidemiology*, 2021; 36(12): 1237-1240.
12. Fernández A. Molecular biology clues portray SARS-CoV-2 as a gain-of-function laboratory manipulation of Bat CoV RaTG13. *ACS Med. Chem. Lett.* 2021; 12 (6): pp. 941-942.
13. Lenzo F. Fifty-nine labs around world handle the deadliest pathogens-only a quarter score high on safety. (2021-14-06) [2022-12]. [www.theconversation.com](http://www.theconversation.com) June 14, 2021
14. McFadden J, Al-Khalili, J. The origins of quantum biology.” *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences* 2018; 2220(474): 674.
15. Thomas Y. From high dilutions to digital biology: the physical nature of the biological signal. *Homeopathy* 2015; 104(4): 295-300.
16. Cifra, M, Fields, J.Z. Electromagnetic cellular interactions. *Progress in Biophysics and Molecular Biology* 2011; 105(3): 223-246.
17. Pollock JK, Pohl DC. Emission of radiation by active cells. In: *Frohlich H. Biological coherence and response to external stimuli*. New York:Springer:1988:140-147.
18. Reguera G. When microbial conversations get physical. *Trends Microbiol* 2011; 19(3):105-113.
19. Posfai, M., Dunin-Borkowski, R. E. Magnetic nanocrystals in organisms. *Elements* 2009; 5(4): 235-240.
20. Binhi VN. *Magnetobiology: Underlying Physical Problems*. Academic Press: San Diego: 2002.
21. Chaturvedi U, Shrivastava R. Interaction of viral proteins with metal ions: role in maintaining the structure and functions of viruses. *FEMS Immunology and Medical Microbiology* 2005;43:105-114.
22. Goto T, Furihata K. Natural resonance frequency of the brain depends on only intracranial pressure: Clinical research. *SSRN Electronic Journal*.
23. Babincová, M., Sourivong, P., Babinec, P. Resonant absorption of ultrasound energy as a method of HIV destruction. *Med. Hypotheses* 2000; 55:450.
24. Yang SC, Lin HC, Liu TM., Lu JT, Hung WT, et.al. Efficient structure resonance energy transfer from microwaves to confined acoustic vibrations in viruses. *Sci Rep* 2015;5: 18030.



25. Srivastava Y, Sassaroli E, Swain J, Widom A, Narain M, Montmollin G. Non-chemical signatures of biological materials: Radio signals from COVID-19? *Electromagnetic Biology and Medicine* 2020; 39(4):340-346.
26. Kasting JF, Siefert JL. Life and the evolution of the Earth's atmosphere. *Science* 2002; 296:1066-1068.
27. Price C, Williams E, Elhalel G., Sentman D. Natural ELF fields in the atmosphere and in living organisms. *International Journal of Biometeorology* 2020; 65(1): 85-92.
28. Del Giudice E, Tedeschi A. Water and Autocatalysis in Living Matter, *Electromagnetic Biology and Medicine* 2009; 28: 46-52.
29. Pokorný J, Wu TM. *Biophysical Aspects of Coherence and Biological Order*. Czech Republic: Springer New Academia Praha; 1998.
30. De Ninno A, Castellano AC, Del Giudice E. The supramolecular structure of liquid water and quantum coherent processes in biology. *Journal of Physics Conference Series* 2013; 442 012031.
31. Cho CH, Singh S, Robinson G.W. Understanding all of water's anomalies with a nonlocal potential. *The Journal of Chemical Physics* 1997; 107(19): 7979-7988.
32. Ball P. Water - An Enduring Mystery. *Nature* 2008; 452(7185): 291-292.
33. Chaplin, M. F. Information Exchange within Intracellular Water. In *Water and the Cell* (G. H. Pollack, I. L. Cameron and D. N. Wheatley, eds.), pp. 113-124, Springer, The Netherlands, 2006.
34. Cabane B, Vuilleunier R. *The Physics of Liquid Water*. *Comptes Rendus Geoscience*, Elsevier Masson 2005; 337(1-2): 159.
35. Ho M. Life is Water Electric. *Electromagnetic Biology and Medicine* 2015; 34(2): 113-122.
36. Ho M. Living Rainbow H<sub>2</sub>O. *Institute of Science in Society* 2012; UK.
37. Del Giudice E, Preparata G. Electrodynamical Like-charge Attractions in Metastable Colloidal Crystallites. *Modern Physics Letters B* 1998; 12(21), 881-885.
38. Ho M, Yu-Ming Z, Haffegge J, Watton A, Musumeci F, Privitera G. *The Liquid Crystalline Organism and Biological Water*. In: Pollack G. (ed.) *Cell Biology*. Netherlands: Springer Dordrecht; 2006.
39. Jerman I. The Origin of Life from Quantum Vacuum, Water and Polar Molecules. *American Journal of Modern Physics* 2016; 5: 34.
40. Tsenkova, R. Aquaphotomics: The extended water mirror effect explains why small concentrations of protein in solution can be measured with near infrared light. *NIR News* 2008; 19(4): 12-13.
41. Tiller, William A. *Conscious Acts of Creation: The Emergence of a New Physics*. 1<sup>st</sup> Ed., Walnut Creek: Pavior Pub; 2001: 5, 83-86.
42. Fesenko EE, Gluvstein A. Changes in the state of water, induced by radio frequency electromagnetic fields. *FEBS Letters* 1995; 367: 53-55.
43. Otsuka I, Ozeki S. Does magnetic treatment of water change its properties? *The Journal of Physical Chemistry B* 2006; 110(4): 1509-1512.
44. Ozeki S, Otsuka I. Transient oxygen clathrate-like hydrate and water networks induced by magnetic fields. *ChemInform* 2007; 38(4).
45. Grewal HS, Maheshwari BL. Magnetic treatment of irrigation water and snow pea and chickpea seeds enhances early growth and nutrient contents of seedlings. *Bioelectromagnetics* 2010; 32(1): 58-65.
46. Dotta BT, Karbowski LM, Murugan NJ, Persinger M.A. Incremental Shifts in pH Spring Water Can Be Stored as "Space-Memory:." Encoding and Retrieval Through the Application of the Same Rotating Magnetic Field. *Neuroquantology* 2013; 11(4): 511-518.
47. Gang N, Persinger MA. Planarian activity differences when maintained in water pre-treated with magnetic fields: a nonlinear effect. *Electromagnetic biology and medicine* 2011; 30(4): 198-204.
48. Gang N, St-Pierre LS, Persinger MA. Water dynamics following treatment by one hour 0.16 tesla static magnetic fields depend on exposure volume. *Water* 2012; 3: 122-131.
49. Binhi VN. *Theoretical Concepts In Magnetobiology*. *Electro- and Magnetobiology* 2001; 20 (1): 43-58.
50. Norman R, Dunning-Davies J. *The Informational Magneccule: The Role of Aqueous Coherence and Information in Biological Dynamics and Morphology*. *American Journal of Modern Physics* 2017; 6: 17.
51. Binhi V, Prato F. Biological effects of the hypomagnetic field: an analytical review of experiments and theories. *Plos One* 2017; 12(6): e0179340.
52. Cardella C, Magistris L, Florio E, Smith C. Permanent changes in the physico-chemical properties of water following exposure to resonant circuits. *JSE* 2001; 25(4): 501-518.
53. Tsouris, P.A. *Investigation of Coherent Signals in Water*. Guildford, Surrey: University of Surrey; Ph.D. Thesis, 1995.
54. Toledo E.J.L. Influence of magnetic field on physical-chemical properties of the liquid water: insights from experimental and theoretical models. *J Mol Struct* 2008; 888(1-3): 409-415.
55. Pershin S.M. Effect of quantum differences of ortho and para H<sub>2</sub>O spinisomers on water properties: Biophysical aspect. *Biophysics* 2013; 58(5): 723-730.
56. Jerman I, Ruzic R, Krasovec R, Skarja M, Mogilnicki L. Electrical transfer of molecule information into water, its storage, and bioeffects on plants and bacteria. *Electro Bio and Med* 2005; 24(3): 341-353.
57. Smirnov J.V. *BioMagnetic hydrology. The effect of a specially modified electromagnetic field on the molecular structure of liquid water*. USA: Global Quantec Inc; 2003: 122-125.
58. Pang XF, Deng B. The changes of property of water under action of magnetic-field and its mechanism of change (in Chinese). *Chin J Atom Mol Phys* 2007; 24: 281-290.
59. Coey JMD, Cass, S. Magnetic water treatment. *J Magn Mater* 2000; 209: 71-74.
60. Colic M, Morse D. The elusive mechanism of the magnetic 'memory' of water. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 1999; 154 (1-2): 167-174.
61. Wang Y, Li Z. Effect of magnetic field on the physical properties of water. *Results in Physics* 2018; 8: 262-267.
62. Chang K, Weng C. The effect of an external magnetic field on the structure of liquid water using molecular dynamics simulation. *J Appl Phys* 2006; 100: 043917-043922.
63. Yang D, Yang L. Magnetization of water and magnetized water (in Chinese). *Biol Magn* 2000; 3: 20-25.
64. Higashitani K, Oshitani J, Ohmura, N. Effects of magnetic field on water investigated with fluorescent probes. *Colloids Surf A: Physicochem Eng Aspects* 1996; 109: 167-173.
65. Santilli R. M. *The new fuels with magneccular structure*. International Academic Press; 2005.
66. Norman R, Dunning-Davis, J. *The informational magneccule: the role of aqueous coherence and information in biological*

- dynamics and morphology. *American Journal of Modern Physics* 2017; 6: 4-1.
67. Persigner, M. Thixotropic phenomena in water: quantitative indicators of casimir-magnetic transformations from vacuum oscillations (virtual particles). *Entropy* 2015; 17: 6200-6212
  68. Murugan NJ, Karbowski LM., Lafrenie RM, Persinger MA. Maintained exposure to spring water but not double distilled water in darkness and thixotropic conditions to weak (~1  $\mu$ t) temporally patterned magnetic fields shift photon spectroscopic wavelengths: effects of different shielding materials. *Journal of Biophysical Chemistry* 2015; 6:14-28.
  69. Bellavite P, Chirumbolo S, Marzotto M. Hormesis and its relationship with homeopathy. *Hum Exp Toxicol* 2010; 29(7):573-579.
  70. Wiegant F., Van Wijk R. The similia principle: Results obtained in a cellular model system. *Homeopathy* 2010; 99(1): 3-14.
  71. Linde K, Jonas WB, Melchart D, Worku F, Wagner, H, Eitel, F. et.al. "Critical review and meta-analysis of serial agitated dilutions in experimental toxicology." *Hum Exp Toxicol* 1994; 13(7):481-92; Projekt Munchener Modell, Ludwig-Maximilians-Universitat, Munchen, GER.
  72. Chattopadhyay R, Mahata, CR. A fundamental study to observe correlation at molecular level between bio-samples of patients and indicated homeopathic medicines. *Int J High Dilution Res* ISSN 1982-6206;15(3):11-17.
  73. Roy R, Tiller W, Bell I, Hoover, MR. The structure of liquid water; novel insights from materials research; potential relevance to homeopathy. *Materials Research Innovations* 2005; 9(4): 98-103.
  74. Del Giudice E, Preparata G. A new QED picture of water: understanding a few fascinating phenomena. In: Pritchard, D.; Yogendra Srivastava, E.; et.al. (Eds.) *Macroscopic Quantum Coherence*. Singapore: World Scientific Publishing Co Pte Ltd.; 1998: 49-64.
  75. Preparata G. *Quantum Field Theory of Superradiance*. In: Chrubini R, Dal Piaz P, Minette, B. (Eds.). *Problems of Fundamental Modern Physics*. Singapore: World Scientific Publishing Co Pte Ltd.; 1990.
  76. Widom A, Srivastava Y. The biophysical basis of Benveniste experiments: entropy, structure, and information in water. *International Journal of Quantum Chemistry* 2010; 110(1): 252-256.
  77. Del Giudice, E. Is the "Memory of Water" A Physical Impossibility? In: Endler PC, Schulte J. (Eds.). *Ultra High Dilution*. Dordrecht: Kluwer Academic Publishers; 1994: 117-119.
  78. Cartwright, S. Homeopathic potencies may possess an electric field(-like) component: Evidence from the use of encapsulated solvatochromic dyes. *Homeopathy* 2019;109(01): 014-022.
  79. Bhattacharya, T., et.al. (2019). Investigation of the origin of voltage generation in potentized homeopathic medicine through Raman spectroscopy. *Homeopathy*, 108(02), 121-127.
  80. Smith R, Boericke, GW. Modern instrumentation for the evaluation of homeopathic drug structure, *J. Am. Inst. Hom.*1966; 59:263.
  81. Sachs AD. Nuclear magnetic resonance spectroscopy of homeopathic remedies. *J. Holistic Med* 1983; 5: 172-175.
  82. Demangeat JL. NMR water proton relaxation in unheated and heated ultrahigh aqueous dilutions of histamine: evidence for an air-dependent supramolecular organization of water. *J Mol Liq* 2009; 144(1):32-9.
  83. Rey L. Thermoluminescence of ultra-high dilutions of lithium chloride and sodium chloride. *Physica A: Statistical Mechanics and its Applications* 2003;323: 67-74.
  84. Klein S, Würtenberger S, Wolf U, Baumgartner S, Tournier, A. *Physicochemical Investigations of Homeopathic Preparations: A Systemic Review and Bibliometric Analysis – Part 1. The Journal of Alternative and Complementary Medicine* 2018; 25(9).
  85. Tournier A, Klein S., Würtenberger S, Wolf U, Baumgartner S. *Physicochemical Investigations of Homeopathic Preparations: A Systemic Review and Bibliometric Analysis – Part 2. The Journal of Alternative and Complementary Medicine* 2019; 25 (9): 890-901.
  86. Kokornaczyk M, Wurtenberger S. Phenomenological characterization of low-potency homeopathic preparations by means of pattern formation in evaporating droplets. *Homeopathy* 2019; 108(02): 108-120.
  87. Doesburg P, Andersen O, Scherr C, Baumgartner S. Replication of specific effects of a Stannum metallicum 30x preparation in a cress seedling/biocrystallization test system. *Homeopathy* 2016; 105(1): 12-13.
  88. Dei A, Bernardini S. Hormetic effects of extremely diluted solutions on gene expression. *Homeopathy* 2015; 104(2): 116-122.
  89. Frenkel M, Mishra, BM., Sen S, Yang P, Pawlus A, Vence L, et.al. Cytotoxic effects of ultra-diluted remedies on breast cancer cells. *International Journal of Oncology* 2010 36(2):395-403.
  90. Bell IR, Lewis II D, Lewis S, Schwartz, G, Brooks A, Scott, A. EEG alpha sensitization in individualized homeopathic treatment of fibromyalgia. *Int J Neurosci* 2004; 14 (9): 1195–1220.
  91. Jonas W, Dillner DK. Protection of mice from tularemia infection with ultra-low, serial agitated dilutions prepared from francisella tularensis-infected tissue 1. *J Sci Explo* 2000; 14: 35-52.
  92. Camerlink, I. Homeopathy as replacement to antibiotics in the case of escherichia coli diarrhoea in neonatal piglets. *Homeopathy* 2010; 99(1): 57-62.
  93. Davenas E, Beauvais F, Amara J, Oberbaum M, Robinzon B, Miadonnai A. Human basophil degranulation triggered by very dilute antiserum against IgE. *Nature* 1988; 333(6176): 816-818.
  94. Belon P, Cumps J, Ennis M, Mannaioni PF, Sainte-Laudy J, Roberfroid M. Inhibition of human basophil degranulation by successive histamine dilutions: results of a European multicentre trial. *Inflammation Research* 1999; 48 (0): 17–18.
  95. Yurkovsky, Savely. *Biological, Chemical, and Nuclear Warfare: Protecting Yourself and Your Loved Ones: The Power of Digital Medicine*. Chappaqua: Guided Digital Medicine Series Science of Medicine Pub.; 2003.
  96. Khuda-Bukhsh AR. Towards understanding molecular mechanisms of action of homeopathic drugs: an overview. *Molecular and cellular biochemistry* 2003; 253(1-2): 339-345.
  97. Watterson JG. A role for water in cell structure. *Biochemical Journal* 1987; 248(2): 615-617.
  98. Del Giudice E, Stefanini P. Emergence of self-organization in aqueous systems and living matter. 2018. Retrieved from
  99. Hunting ER, Matthews J, Fernández de Arróyabe Hernández P, England S, Kourtidis K, Koh K. Challenges in coupling atmospheric electricity with biological systems. *Int. J. Biometrol* 2020; Jan;65(1):45-58.. Epub 2020 Jul 14.
  100. Bell IR. (2019). The complexity of the homeopathic healing response Part 1 and 2: The role of the body as a complex

- adaptive system in simillimum-initiated recovery from disease. *Homeopathy* 2019; 109(02): 042-064.
101. Khuda-Bukhsh AR. Current trends in high dilution research with particular reference to gene regulatory hypothesis. *The Nucleus* 2014; 57(1):3-17.
  102. Mattson MP. Hormesis and disease resistance: activation of cellular stress response pathways. *Hum Exp Toxicol* 2008; 27:155-162.
  103. Yurkovsky S. Can energetic vaccines, based on physics, be the sound options for covid-19 and other pandemics, in the absence of pharmaceutical vaccines? *Journal of Infectious Diseases and Therapy* 2020; 8:6.
  104. Smith C. Is a living system a macroscopic quantum system? *Frontier Perspectives* 1997; 7: (1)
  105. McClare CWF. Resonance in bioenergetics. *Annals of the New York Academy of Sciences* 1974; 227: 74-97.
  106. Frohlich H. Coherent excitations in active biological systems. In: Gutmann, F., Keyzer, H., Eds. *Modern Bioelectrochemistry*. New York: Plenum Press; 1986: 241-261.
  107. Adey W.R. Physiological signaling across cell membranes and cooperative influences of extremely low frequency electromagnetic fields. In: Frohlich H. Ed. *Biological coherence and response to external stimuli*, 1<sup>st</sup> Ed; New York: Springer; 1988: 148.
  108. Cosic I. Macromolecular bioactivity: is it resonant interaction between macromolecules? – theory and applications. *IEEE Transactions on Biomedical Engineering* 1994; 14: 1101-1114.
  109. Popp FA. *The Power of Weakness*. 2. International Congress Weak and Ultraweak Fields and Radiation in Biology and Medicine St. Petersburg; 2000.
  110. Pokorný J, Hašek J, Jelínek F, Šároch J, Palán B. Electromagnetic activity of yeast cells in the M phase. *Electro- and Magnetobiology* 2000; 20: 371-396.
  111. Pienta KJ, Coffey DS. Cellular harmonic information transfer through a tissue tensegrity-matrix system. *Medical Hypotheses* 1991; 34:88-95.
  112. Melkikha AV, Khrennikov A. Nontrivial quantum and quantum-like effects in biosystems: Unsolved questions and paradoxes. *Progress in Biophysics and Molecular Biology* 2015; 119(2): 137-161.
  113. Del Giudice E, De Ninno A, Fleischmann M, Mengoli G, Milani M., Talpo G. Coherent Quantum Electrodynamics in Living Matter. *Electromagnetic Biology and Medicine* 2005; 24: 199-210.
  114. De Ninno A, Castellano AC, Del Giudice E. The supramolecular structure of liquid water and quantum coherent processes in biology. *Journal of Physics: Conference Series* 2013; 442: 012031.
  115. Ho M, Yu-Ming Z, Haffegge J, Watton A, Musumeci F, Privitera G. The liquid crystalline organism and biological water. In: Pollack G. (ed.) *Cell Biology*. Dordrecht: Springer; 2006.
  116. Sunnerhagen M, Denisov VP, Venu K, Bonvin AM, Carey J, Halle B. Water molecules in DNA recognition I: hydration lifetimes of trp operator DNA in solution measured by NMR spectroscopy. *J Mol Biol*. 1998; 282(4):847-858.
  117. Karbowski LM, Persinger, MA. Variable viscosity of water as the controlling factor in energetic quantities that control living systems: physicochemical and astronomical interactions. *International Letters of Chemistry, Physics and Astronomy* 2015, 43 (January): 1–9.
  118. Del Giudice E; Tedeschi A. Water and Autocatalysis in Living Matter. *Electromagnetic Biology and Medicine* 2009; 28:46-52.
  119. Del Giudice E, Voeikov, V, Tedeschi A, Vitiello G. The origin and the special role of coherent water in living systems. *Research Signpost* 37/661 (2), Fort P.O. Trivandrum-695 023 Kerala, India 2015.
  120. Del Giudice E, Preparata G. Coherent dynamics in water as a possible explanation of biological membranes formation. *Journal of Biological Physics* 1995; 20(1-4): pgs. 105-116.
  121. Del Giudice E, Preparata, G. A new QED picture of water: Understanding a few fascinating phenomena. In: Sassaroli, E., et.al. *Macroscopic Quantum Coherence*. Singapore: World Scientific Publishing Co Pte Ltd.;1998: 108-119.
  122. Del Giudice E, Doglia S, Milani M, Smith CW., Vitiello G. Magnetic flux quantization and Josephson behaviour in living systems. *Physica Scripta* 1989; 40(6): 786-791.
  123. Kwiatkowska MZ, Heath JK. Biological pathways as communicating computer systems. *Journal of Cell Science* 2009; 122(16): 2793-2800.
  124. Gariaev PP, Vasiliev A. The genome as a holographic computer. *Hypothesis* 1991; 24-43; 49-64.
  125. Press W, Hawkins J, Jones Jr S, Schaub J, Finkelstein I et.al. HEDGES error-correcting code for DNA storage corrects indels and allows sequence constraints. *PNAS* 2020; 117 (31): 18489-18496
  126. Hong, FT. *Molecular Electronics: Biosensors and Biocomputers*. New York: Plenum Press; 1999:222, 236-237, 240-241, 246-247.
  127. Bischof, M. Holism and field theories in biology – non-molecular approaches and their relevance to biophysics. In: Chang J, Fisch J, Popp FA. (eds). *Biophotons* 1<sup>st</sup> ed. Dordrecht: Kluwer; 1998.
  128. Bischof M. Field concepts and the emergence of a holistic biophysics. In: Belousov LV, Voeikov VL, Van Wijk R, Eds. *Biophotonics and Coherent Structures*. Moscow: Moscow University Press; 2000.
  129. Benveniste J. A fundamental basis for the effects of EMFs in biology and medicine: The interface between matter and function. *Bioelectromagnetic and Subtle Energy Medicine* 2014; 31-33. <https://doi.org/10.1201/b17978-9>.
  130. Gariaev PP. Another understanding of the model of genetic code theoretical analysis. *Open Journal of Genetics* 2015; 05(02): 92-109.
  131. Gariaev PP. *Theoretical Models of Wave Genetics and Reproduction Wave Immunity in the Experiment*. New Medical Technologies, New Medical Equipment 2007; 11: 26-70.
  132. Gariaev PP, Kaempf U, Marcer P, Tertishny G, Birshtein B, Iarochenko A. The DNA-wave biocomputer. Institute of Control Sciences, Russian Academy of Sciences, Moscow 2000. Extended Abstract (full paper presented at CASYS 2000, the Fourth International Conference on Computing Anticipatory Systems, August 7-12th HEC LIEGE, Belgium).
  133. Binhi V, Prato F. Biological effects of the hypomagnetic field: An analytical review of experiments and theories. *Plos One* 2017; 12(6).
  134. Poponin V. Nonlinear stochastic resonance of ions loosely bound within proteins as a mechanism for the detection of weak EMF by cells. In Allen, M. J.; Sowers, A.E. (eds.) *Charge and Field effects in Biosystems: 4 - Proceedings of the 1994 international symposium*. Singapore; World Scientific:1994.
  135. Del Giudice E, Tosi M. The principle of minimal stimulus in the dynamics of the living organism. (2019-08)
  136. Antonchenko VY, Ilyin VV. Points at issue in the physics of water and homeopathy. *British Homeopathic Journal* 1992; 81: 91-93.

137. Van Wijk R, Wiegant, FA. Physiological effects of homeopathic medicines in closed phials –a critical evaluation. *Homeopathy* 2015; 104(4): 292-294.
138. Dürr, H. Are Biology and Medicine Only Physics? Building Bridges Between Conventional and Complementary Medicine. *Bulletin of Science, Technology and Society* 2002; 22(5): 338-351.
139. Bellavite P, Conforti A, Pontarollo F, Ortolani R. Immunology and homeopathy. 2. Cells of the immune system and inflammation. *Evid Based Complement Alternat Med.* 2006; 3(1):13-24.
140. Siqueira CM, Siqueira C, Costa B, Amorim A, Gonçalves M, Veiga V. H3N2 homeopathic influenza virus solution modifies cellular and biochemical aspects of MDCK and J774G8 cell lines. *Homeopathy* 2013; 102(1): 31-40.
141. Conde Diez, S., et.al. (2019). Impact of a homeopathic medication on upper respiratory tract infections in COPD patients: Results of an observational, prospective study (EPOXILO). *Respiratory Medicine*, 146, 96-105.
142. Ferley J. A controlled evaluation of a homeopathic preparation in the treatment of influenza-like syndromes. *Br J Clin Pharmacol* 1989; 27(3): 329-335.
143. Siqueira, CM, Homsani F, Veiga V, Lyrio C, Mattos H, Passos S. et.al. Homeopathic medicines for prevention of influenza and acute respiratory tract infections in children: Blind, randomized, placebo-controlled clinical trial. *Homeopathy* 2016; 105(1): 71-77.
144. Saxena SK, Chitti SV. Complementary and alternative medicine in alliance with conventional medicine for influenza therapeutics and prevention. *Future Virology* 2016; 11(10): 661-664.
145. Szeto AL, Rollwagen F. Rapid induction of protective tolerance to potential terrorist agents: a systematic review of low- and ultra-low dose research. *Homeopathy* 2004; 93(4):173-178.
146. Bracho G, Varela E, Fernández R, Ordaz B, Marzoa N, Menéndez J. Large-scale application of highly-diluted bacteria for Leptospirosis epidemic control. *Homeopathy* 2010; 99(3): 156-166.
147. Castro D, Galvao, Nogueira, JW. Profilaxis de la meningitis con meningococcinum. *Homeopathia* 1974; 41(5): 6-11.
148. Camerlink I, Ellinger, L, Bakker, EJ, Lantinga EA. Homeopathy as replacement to antibiotics in the case of escherichia coli diarrhoea in neonatal piglets. *Homeopathy* 2010; 99(1): 57-62.
149. Aparicio AC, Oliveira L, Silva J, Coelho C, Pinheiro S, Souza, M. Interaction between solvatochromic dyes and water sampled from a natural source treated with high dilutions of phosphorus. *Homeopathy* 2020; 109 (03):126-132.
150. Montagnier, L., Aïssa, J., Ferris, S., Montagnier, J., Lavallée, C. Electromagnetic signals are produced by aqueous nanostructures derived from bacterial DNA sequences. *Interdisciplinary Sciences, Computational Life Sciences* 2009; 1(2): 81–90.
151. Montagnier L, Giudice E, Aïssa J, Lavallee C, Motschwiler S, Capolupo A, Polcari A. Transduction of DNA information through water and electromagnetic waves. *Electromagnetic Biology and Medicine* 2015; 34: 106-112.
152. Heredia-Rojas JA., Torres-Flores A, De la Fuente A, Mata-Cárdenas B, Rodríguez-Flores L, Barrón-González M. Entamoeba histolytica and trichomonas vaginalis: Trophozoite growth inhibition by metronidazole electro-transferred water. *Experimental Parasitology* 2011;127: 80-83.
153. Heredia-Rojas JA, Villarreal-Treviño L, Rodríguez-De la Fuente, AO, Herrera-Menchaca LI, Gomez-Flores R, Mata-Cárdenas, BD, Rodríguez-Flores, LE. Antimicrobial effect of vancomycin electro-transferred water against methicillin-resistant staphylococcus aureus variant. *African Journal of Traditional, Complementary and Alternative Medicines* 2015; 12: 104-108.
154. Heredia-Rojas, JA, Gomez-Flores R, Rodríguez-de la Fuente A., Monreal-Cuevas E., Torres-Flores A., Rodríguez-Flores L.et.al. Antimicrobial effect of amphotericin B electronically-activated water against candida albicans. *African Journal of Microbiology Research* 2012; 6: 3684-3689.
155. Folletti A, Ledda M, D'Emilia E, Grimaldi S, Lisi A. Differentiation of human LAN-5 neuroblastoma cells induced by extremely low frequency electronically transmitted retinoic acid. *The Journal of Alternative and Complementary Medicine* 2011;17: 701-704.
156. Folletti A, Ledda M, D'Emilia E, Grimaldi S, Lisi A. Experimental finding on the electromagnetic information transfer of specific molecular signals mediated through aqueous system on two human cellular models. *The Journal of Alternative and Complementary Medicine* 2012;18: 258-261.
157. Folletti A, Ledda M, Piccirillo S, Grimaldi S, Lisi A. Electromagnetic information delivery as a new tool in translational medicine. *International Journal of Clinical and Experimental Medicine* 2014; 7: 2550-2556. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4211758>.
158. Benveniste J. Molecular signaling at high dilution or by means of electronic circuitry. *Journal of Immunology* 1993; 150:146A.
159. Benveniste J. Transfer of Biological Activity by Electromagnetic Fields. *Frontier Perspectives* 1993; 3(2): 113-115.
160. Benveniste, J. Transfer of the molecular signal by electronic amplification. *Federation of American Societies for Experimental Biology (FASEB) Journal* 1994; 9:A398.
161. Benveniste J. Direct transmission to cells of a molecular signal via an electronic device. *Federation of American Societies for Experimental Biology (FASEB) Journal* 1995; 9:A227.
162. Benveniste J, Aïssa J, Guillonnet D. A simple and fast method for in vivo demonstration of electromagnetic molecular signaling (EMS) via high dilution or computer recording. *Federation of American Societies for Experimental Biology (FASEB) Journal* 1999;13:A163.
163. Benveniste J, Aïssa J, Jurgens P, Hsueh W. Digital biology: Specificity of the digitized molecular signal. *Federation of American Societies for Experimental Biology (FASEB) Journal* 1998; 12:A412.
164. Benveniste J, Jurgens P, Aïssa J. Digital recording/transmission of the cholinergic signal. *Federation of American Societies for Experimental Biology (FASEB) Journal abstract* 1996; 10:A1479.
165. Benveniste J, Aïssa J, Jurgens P, Hsueh W. Transatlantic transfer of digitized antigen signal by telephone link. *Journal of Allergy and Clinical Immunology* 1997; 99(1).
166. Benveniste J, Kahhak L, Guillonnet, D. Specific remote detection of bacteria using an electromagnetic/digital procedure. *Federation of American Societies for Experimental Biology (FASEB) Journal* 1999; 13:A852.
167. Citro M, Smith C, Scott-Morley A, Pongratz P, Endler C. Transfer of information from molecules by means of electronic amplification. Preliminary studies. In: Endler, PC, Schulte J. (Eds.). *Ultra High Dilution*. Dordrecht: Springer Netherlands, Kluwer Academic Publishers; 1994: 209-214.
168. Aïssa J. Transfer of molecular signals via electronic circuitry. *FASEB Journal* 1993; 7:A602 (3489).

169. Endler PC, Pongratz W, Smith CW, Schulte J. Non-molecular information transfer from thyroxine to frogs with regard to 'homeopathic' toxicology. *J Vet and Human Toxicology* 1995; 37: (3).
170. Thomas Y. Direct transmission to cells of a molecular signal (phorbol myristate acetate, PMA) via an electronic device. *FASEB Journal* in press (Abs) 1995.
171. Seneskowitsch F, Endler P, Pongratz W, Smith C. Hormone effects by CD record replay. *FASEB Journal* 1995; 9 (Abs. 12161).
172. Gariaev P, Usupbekova B, Leonova E. Materialization of DNA Fragment and, Wave Genetics in Theory & Practice. *DNA Decipher Journal* 2014; 4:1.
173. Butler-Laporte G, Lawandi A, Schiller I, Yao M, Dendukuri N, McDonald E. Comparison of saliva and Nasopharyngeal swab nucleic acid amplification testing for detection of SARS-Cov-2. *JAMA Internal Medicine* 2021;181:3. 353.
174. Korenbaum V, Chernysheva T, Galay V, Galay R, Ustinov A., Vladislav, K. On the Reliability of Spectral Evidences of Electronic Copying Phenomenon Used to Produce Homeopathic-Like Preparations in Complementary Medicine. *Water A Multidisciplinary Research Journal* 2019; 10.14294/WATER.2019.3.
175. Smith CW. Watergates – Logic Operations in Water. Belgium: 2005 7th International Conference on Computing Anticipatory Systems, HEC Liege., CASYS '05 Abstracts – Symposium 10, p. 9 Intl. J. of Computing Anticipatory Systems 19:323-331 (2006).
176. Piatti E, Albertini M, Baffone W, Fraternali D, Citterio B, Piacentini, M. et.al. Antibacterial effect of magnetic field on *Serratia marcescens* and related virulence to *Hordeum vulgure* and *Rubs fruticosus callus cell*. *Comp. Biochem Physiol. Part B Biochem. Mol. Biol.* 2002; 132 (2): 359-365.
177. Alkhaman M; Saddiq, A. The effect of a magnetic field on the physical, chemical and microbiological properties of the lake water in Saudi Arabia. *Journal of Evolutionary Biology* 2010; 2(1): 7-14.
178. Mohamed AA, Ali FM, Gaafar EA, Magda H.R. Effect of a magnetic field on the biophysical, biochemical properties and biological activity of *Samonella typhi*. Giza: Cairo University Faculty of Science; Master's Thesis Submitted for Biophysics Department 1997; 12-35.
179. Homeopathic Product Regulation: Evaluating FDA's Regulatory Framework After a Quarter-Century. Testimony of Adriane Fugh-Berman MD, Associate Professor, Dept. of Pharmacology and Physiology Georgetown University Medical Center 2015.
180. Krenzelok EP. 2009 annual report of the American Association of Poison Control Center's National Poison Data System (NPDS): 27th annual report. *Clinical Toxicology* 2014; 52(10): 1284-1284.
181. Abramson J. *Overdosed America: The Broken Promise of American Medicine*. New York: HarperCollins; 2013: 93, 96.
182. Kassirer J. *On the take: how medicine's complicity with big business can endanger your health*. New York: Oxford University Press; 2004.
183. O'Mahony S. *Can medicine be cured?: the corruption of a profession*. London: Head of Zeus; 2019.
184. Piller C. FDA and NIH let clinical trial sponsors keep results secret and break the law. *Science AAAS* 13 January 2013.
185. Angell M. Drug companies and doctors: a story of corruption. *The New York Review of Books Magazine*. (2009-01) [2015-08] <http://www.nybooks.com/articles/archives/2009/jan/15/drug-companies-doctors-story-of-corruption>
186. Kearney P. The medical profession, industry, and continuing medical education: Finding the balance that's right for patients. *American Journal of Medicine* 2019; 132(8): 921-925.
187. Herzlinger R. Why innovation in healthcare is so hard. *Harvard Business Review* 2006 Retrieved from Why Innovation in Health Care Is So Hard (hbr.org) [2018-09]
188. Montagnier L. *The Memory of Water* (2014-07) [2019-07]
189. Wilson E.O. *Consilience: The Unity of Knowledge*. New York: Vintage Books; 2014: 42.
190. Trefil J, Hazen RM. *The Sciences: An Integrated Approach* 2<sup>nd</sup> ed. New York: John Wiley. 2000: VI, 15
191. Pugh G.E. *The Biological Origin of Human Values* 1<sup>st</sup> ed., New York: Basic Books; 1977: 58.
192. The human body at cellular resolution: The NIH human Biomolecular atlas program. *Nature* 2019, 574(7777), 187-192.
193. Durr P, Popp F, Schommers W. *What Is Life? Scientific Approaches and Philosophical Positions*. Singapore: World Scientific Publishing Company; 2002.
194. Kuhn T.S. *The structure of scientific revolutions* 3rd ed. Chicago: University of Chicago Press; 1996.
195. Mahoney MJ. Publication prejudices: An experimental study of confirmatory bias in the peer review system. *Cognitive Therapy and Research* 1977; 1(2): 161-175.
196. Resch K, Ernst E, Garrow JA. Randomized controlled study of reviewer bias against an unconventional therapy. *J R Soc Med* 2000; 93:164-167.
197. Matthiessen P. Homeopathy and pluralism of theories in medicine arguments put forward to remove homeopathic products from pharmacies contradict actual scientific evidence and suggest deliberate misinformation. *American Journal of Clinical and Experimental Medicine* 2019; 7, (2): 42-46.
198. Wilson K. Evidence-based medicine. The good, the bad and the ugly. A clinician's perspective. *J Eval Clin Pract* 2010;16(2):398-400.
199. Sturmburg JP. EBM: a narrow and obsessive methodology that fails to meet the knowledge needs of a complex adaptive clinical world: a commentary on Djulbegovic B, Guyatt GH, Ashcroft RE. *Cancer Control* 2009; 16: 158-168. *J Eval Clin Pract*, 2009;15(6):917-923.
200. Fernandez A, Sturmburg J, Lukersmith S, Madden R, Torkfar G, Colagiuri R. Evidence-based medicine: is it a bridge too far? *Health Res Policy Sys* 2015; 13: 66.
201. Oster ME, Shay DK, Su JR, Gee J, Creech CB, Broder KR. Myocarditis cases reported after mRNA-based COVID-19 vaccination in the US from December 2020 to August 2021. *JAMA* 2022; 327(4): 331.
202. Havervall S, Rosell A, Phillipson M, Mangsbo S, Nilsson P, Hober S. et.al. Symptoms and functional impairment assessed 8 months after mild COVID-19 among health care workers. *JAMA* 2021; 325(19): 2015-2016



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