

# Background For Establishing Informational Medicine As a Clinical Practice-Chapter 1

## Introduction

This chapter will take us through the pertinent knowledge base of the sciences of physics, chemistry and biology in regards to Informational Medicine (IM). The concepts related to IM arise from the body of knowledge and information afforded to us by those practicing the scientific method. The workings of science are based in observation, hypothesis testing, phenomenal research and construct formation. It is hypothesis testing where the scientific method is utilized. The experimental results depend on how the experiment to test the hypothesis is structured, organized and carried out. It is imperative to always look at the materials and methods used, the conceptual nature of the hypothesis tested (the hypothesis is always stated in the negative) and the conclusions the author derived from the results of the experiment. There are good, mediocre and bad experiments just as there are good, mediocre and bad scientists. It is always a good idea to try to determine if there is any bias or hidden agenda that the author of the experiment is trying to further. You will need to pay particular attention to the Materials & Methods section as well as the manner in which the experiment was set up. After all, for many years it was never shown that smoking tobacco is bad for your health as the people that were performing the experiments were being paid by the tobacco companies [1]. They did not want to bite the hand that fed them!

## Physics

Modern contemporary physics gives us a view of matter, energy and the assorted laws of the universe. It seems that what we perceive with our physical senses belies the actual energy and field nature that is the reality of our material world. Quantum Theory now with the Metaphysics of Space and Motion and the Wave Structure of Matter, sensibly explains these phenomena, according to Geoff Haselhurst and Milo Wolff [2]. Their explanation is that "Matter is a Spherical Standing Wave which creates a 'particle effect' at the Wave-Center" and that only discrete standing wave interactions can occur during 'Resonant Coupling'. Please refer to the link for a more complete explanation.

The theory of Electromagnetism formally started with the work of Maxwell JC [3] and his concepts concerning the nature of electromagnetism. Below are his final differential equations in word form [3].

1. The divergence operator of an electric field =  $\rho/\epsilon_0$ , which means that the electric field volume is proportional to the charge inside
2. The divergence operator of a magnetic field = zero, which means that there are no magnetic monopoles; the total magnetic flux piercing a closed surface is zero
3. The curl operator of an electric field =  $-\delta B/\delta t$ ; which

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means the voltage accumulated around a closed circuit is proportional to the time rate of change of the magnetic flux that it encloses

4. The curl operator of a magnetic field =  $\mu_0$  times (current density plus  $\epsilon_0$  times  $\delta$  electric field/ $\delta$  time); which means that electric currents and changes in electric fields are directly proportional to the magnetic field circulating about the area that they pierce

However, the scientists of the day did not know what to do with the  $\rho$  symbol in the 1st equation above, so they simply ignored that whole 1st equation. The  $\rho$  symbol relates to scalar energy and thus this first equation deals with the concept of scalar energy.

So physics gives us a good view of how "things" are put together and interact with each other. The key is to remember that all matter has both a wave and energy field nature; it is not possible to have one without the other. When energy is transferred from one place to another, between standing wave centers, some form of electromagnetic wave is also exchanged. The portion of the entire electromagnetic spectrum that humans see with their eyes is called "light". For the purposes of this discussion, how do light and matter interact? Our light comes from a star, Sol (a ball of thermodynamically reacting matter) and impinges upon the Earth (relatively stable matter). Thus, there is a relationship between matter and light. This relationship is the topic of the science of quantum electrodynamics [4]. All phenomena involving electrically charged particles interacting by means of the exchange of photons represents the quantum counterpart of classical electrodynamics giving a complete account of matter and light interaction. As described above, modern physical science has shown that photons are not particles but standing wave interactions. It is the interaction of the standing waves that gives the impression of substance at the point of intersection.

An electromagnetic wave consists of two primary components, an Electric Field and a Magnetic Field. The electric field results from the force of voltage or electromotive force. The magnetic

field results from the flow of current as electrons move between the differences of voltage. Although electromagnetic fields that are radiated are commonly considered to be waves, under certain circumstances their behavior makes them appear to have some of the properties of spherical standing waves, see above. In general, however, it is easier to picture electromagnetic radiation in space as horizontal and vertical lines of force oriented at right angles to each other. These lines of force are made up of an electric field (E) and a magnetic field (H) or (B), which together make up the electromagnetic field in space. Please refer to the equations of Maxwell above. Electromagnetic waves can be imagined as a self-propagating transverse oscillating wave of synchronous electric field and magnetic field components. In describing the characteristics of an electromagnetic wave, much is described about the electric component but very little is said about the magnetic component. For some reason, the magnetic component seems to have been left out of scientific inquiry. This is strange when you consider the fact that Faraday's law was originally based on Michael Faraday's measurements of the electric currents induced within a conducting wire loop when the magnetic flux enclosed by the loop changes, i.e., a changing magnetic field produces an electric field. It was work with bar magnets that led to the discovery of electromagnetism. This in turn led to the discovery of the production of electricity and eventually to the use of modern electronics.

Light, an electromagnetic wave, then is the result of an energy exchange between spherical standing waves of excited electrons in the "valence" area and the standing waves of the nuclear area. Matter always seeks to be at the most stable form with the least amount of energy content. Light seemingly travels in a continuous spiral down a circumscribed tube [5]. This spiral movement will assist you in understanding the flow of energy/field parameters within the human aura or Human Body Field (HBF).

## Chemistry

Physics is the description of the phenomena of energy and matter and the laws governing the universe. Chemistry is the description of the interactions of matter with other matter and the movement of energy through matter according to the laws of Thermodynamics. Of special interest as relates to living organisms is the chemistry of the element carbon, carbon compounds and water.

Carbon is unique in having the appearance of 4 bonding electrons in the "valence" (outermost) shells. Thus, each carbon atom has the structural appearance of a tetrahedron as this shape has the least amount of inherent energy. It seems that matter always seems to end up in the most stable form that is also the state with the least amount of inherent energy. It is with hydrogen that carbon makes up the basic structural backbone of "organic" compounds. Although many organic compounds also contain other elements, it is the carbon-hydrogen bond that defines them as organic. Because of the unique tetrahedron configuration, it is easier for the carbon atom to share its four electrons with another atom or atoms than to lose or gain four electrons. Because each carbon is identical, they all have four valence electrons, so they can easily bond with other carbon

atoms to form long chains or rings. In fact, a carbon atom can bond with another carbon atom two or three times to make double and triple covalent (shared) bonds between two carbon atoms. Long chains of carbon atoms with double and triple bonds are quite common in living organisms. The single covalent bond that connects carbon atoms to other carbon atoms is quite strong, so the subsequent long chains and ring structures are relatively stable. Additionally, the possible combinations of bonding leads to a myriad of organic compounds, millions in fact.

Biochemistry is the study of the organic compounds found associated with living organisms. Biologically derived organic compounds may be generally sorted into 4 categories: proteins, carbohydrates, oils and everything else, including nucleic acids.

Microorganisms may generally be a virus, bacteria, a single cell or very small cellular aggregations. Multi cellular organisms may generally be fungi, plants or animals. All life on the planet Earth is dependent upon the solar radiation and the solar wind. Plants have the ability to use solar radiation as "light" and convert atmospheric carbon dioxide and ground water into carbohydrates and oils. Plants use the nitrates, created by ground bacteria from atmospheric nitrogen, to form proteins. Carbohydrates and proteins are water soluble. Oils are water insoluble and are the basis of membrane phenomena in cellular biochemistry. Membranes are used by cells to compartmentalize metabolic functions, to encapsulate waste products and to package products for transport to within the cell and to without the cell. All of this happens within an aqueous medium that is quite similar to that found in sea/ocean water.

Water is a very special compound and is absolutely required for living processes to occur. A whole book may be written just about the compound water (di-hydrogen oxide), the biophysics of water and the biochemistry of water. Please refer to this article for a very good review of water [6].

The relevance of water to living organisms and for the practice of IM follows. Water is a structured molecule of immense complexity [6]. The water that is associated with multicellular living processes resonates at 4.55 Hz, what the author calls the Geirtz Resonance [7]. Microorganisms have water resonances at 3.79 Hz and 5.31 Hz.

## Biology

Biology is the study of those entities that are capable of a temporary suspension of the 2nd law of Thermodynamics by incorporating various forms of energy into high energy chemical bonds. Biochemistry depends upon the high energy bond of Adenosine-Tri-Phosphate. The other compounds that temporarily store energy are carbohydrates and oils (fats).

For living multicellular organisms such as plants and animals to evolve into the species exist today, several phenomena are needed to be present first. The atmosphere needed abundant oxygen and nitrogen. The seas/oceans needed water that resonates at 4.55 Hz and contains all manner of metal cations, anions formed by electrical storms (mostly nitrates and sulfates), carbonic acid (carbonates) and dissolved gasses. The carbonates yielded the buffering system found in all the aqueous

media of living organisms. This is why free water has a pH of 7.4 before the influence of other cations and anions. Carbonic acid is merely carbon dioxide dissolved in water. Thus, all rain-water is actually mostly carbonic acid. Acid rain-water has dissolved sulfur dioxide and nitrogen oxide in it to form hydro-sulfurous acid and nitric acid.

In the background of the Terran environment at large is a dynamic energy system that sets the stage for the eventual origin and development of living processes [8]. One major contributor is the solar radiation/Solar wind and the other is the magnetosphere of the Earth. The Solar wind and incident radiation interact with the magnetosphere of the Earth to produce, near the surface of the Earth, a grid of electron current called the Birkland currents. These currents interact with the geomagnetic field to produce very stable transverse electromagnetic waves (Prana, Kong Chi) at harmonic frequencies. These frequencies structure water at those harmonic frequencies. The frequency that sets the aquatic medium of water that resonates in all living multicellular organisms is 4.55 Hz. Microorganisms have an aquatic medium that seems to resonate at 3.79 Hz and 5.31 Hz. The location of a disease of microorganismal origin within the human body has the structured water shift away from the 4.55 Hz (Geirtz Resonance) to that of 3.79 Hz and/or 5.31 Hz.

The processes of the evolution of living microorganisms and multi cellular organism generated a system that we call genetics. This system has yielded all of the organisms that exist today. It is the expression of the genetic components of chromosomes called genes within the individual cells of an organism that determines the physical structure, metabolism and continuation

of each species. Plants make the food, Herbivores eat the Plants, Carnivores eat the Herbivores and Parasites eat the Plants and Animals. All produce waste that gets recycled, plants produce oxygen and animals produce carbon dioxide. Both produce matter waste that is eaten by detritus feeders. This is accomplished within the environment that is provided by the dynamic processes of the Earth as the geomagnetic field, the weather patterns and sea/ocean current patterns. Again, the dynamic processes of the Earth are perturbed by the dynamic processes of Sol as electromagnetic radiation and the Solar Wind.

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