A METHOD OF CANCER DIAGNOSIS USING SAMPLES OF SALIVA BASED ON QUANTUM BIOLOGY

Introduction

This work is the result of 25 years of consistent work looking at living systems as operating on the basis of quantum computers. This is known as quantum biology, and there is significant backing, academically, to support this idea.

Conventional bio-medical science focuses exclusively on the pathological and biochemical aspects of biology. This is an approach which works, but there is a deeper reality which could yield significant diagnostic insights.

The following is drawn from my own theoretical work, and that of, in particular, the work of Zeilinger at the University of Vienna, who has demonstrated with his research group several futuristic phenomena such as quantum teleportation and quantum encryption. Much of his work and ideas crystallise the work I have been doing.

Quantum theory describes the world with astonishing precision, whether applied to elementary particles a hundred thousand times smaller than atoms, or to currents super conducting rings a billion times bigger. The most fundamental element of the quantum world is essentially quantisation, the notion that energy, spin and other quantities only come in discrete steps. Therefore the world at its most fundamental level is in effect rather grainy, rather like a lots of pixels on a digital picture. Another enigma is the probabilistic nature of the quantum world, and this is at odds with the classical world of definite physical properties. This is particularly relevant in the work we are doing, in that the results are not as definitive as we would like. Culturally, we all like definite outcomes. This fuels much of the current interest in genetic engineering, the human genome etc. However, if one looks in detail into the world of genetics and genetic engineering, one will find that the outcomes there are also very much probabilistic and are not definitive at all, this is simply a smoke screen to keep the investors pouring the money into the bio-technology industry, which they are doing at the current time. For a high quality book on this, with appropriate references, see 'Genetic Engineering – Dreams or Nightmares?' by Mae-Wan Ho.

In the quantum world there are many strange phenomena, such as entanglement, that is the profound connectedness of objects and processes across infinite distances, and super position, the astonishing proposition that an electron can be in two places at once, a current can flow simultaneously clockwise and anti clockwise, until you actually look to see which way the current is flowing or where the electron is. This process is known as collapsing the wave function, and the simple process of observation produces a definitive result. The specific science underlying the work we've been doing over the past 25 years is quantum electrodynamics (QED), which essentially describes how photons (packets of light), can influence electrons.

What we are proposing, is that information is fundamental, and information itself has as much reality as electricity and magnetism do. We live in an age of information, and we depend increasingly on information technology. The whole reason I'm able to send you this e-mail is dependent on that.

The 'atom' of information is the bit, the quantity contained in the answer to a Yes or No question. This is the only way we can interrogate nature, rather like a lawyer interrogates a witness. There are a whole series of questions posed to which there is either one or the other answer. So in information terms, an elementary particle, billions of time smaller than an atom, can only give one or other answer. Once that answer has been given, then essentially, for example, the position of that particular particle be it an electron comes into reality. Then we call this the collapse of the wave function. So where does the intrinsic randomness found in the quantum world arise? To that end, consider the spin of an electron. Say it is measured along a vertical axis (call it the 'z' axis, three dimensional space has three axis, called the 'x', 'y' and 'z' axis), and found to be pointing up. Because one bit of information has been used to make that statement, no more information can be carried by the electron spin. Consequently, no information is available to predict the amounts of spin in the other two axis (the 'x' and 'y'). So those amounts of spin are of necessity entirely random. If you then measure the spin in one of these directions, there is an equal chance of it pointing right or left, forward or back. This fundamental randomness is what we call 'Heisenderg's Uncertainly Principle'. We believe with the work we are doing, that living systems have found a way around this uncertainty. Therefore the idea of information here is attached to a single elementary system, that can be on electron, a photon or whatever you like. This explains the phenomenon of entanglement where two particles which have been together at one point and should become separated to the opposite ends of the universe, they are so-called entangled, because it is impossible, even in principle, to describe the state of one without knowing the state of the other. So even though they are spatially separate by vast distances potentially, they have no independent existence. This has been proven in experiment. So therefore the graininess of reality is to do with the fact that we can only get Yes or No answers to properties of any elementary system.

I agree with Zeilinger in the respect that a new theory of quantum information is needed if we are able to handle the quantum computers of the future. This technology promises one day to perform calculations far faster than ordinary computers as billions of calculations can be carried on in parallel. This exploits the system of the quantum world to be in more than one state at the same time. Physicists call the building blocks of their planned quantum computers 'qubits'. A qubit is simply an elementary system such as an electron spin. Because a qubit can be in a super position of several states, it must hold not only classical information, that is information giving its actual position in three dimensional space, or some other measurement such as mass, but some more elusive kind of quantum information too.

How do Living Systems relate to this?

There is a wealth of evidence which indicates that living systems work as quantum computers. Certain features of living systems give them the hardware in order to perform in such a way. The main areas that do this are as follows :

1. **Connective Tissue**

   Connective tissue , made from collagen, is liquid crystalline in nature. Collagen molecules can line up with each other to form coherent channels of communication.

2. **Coherence**

   This is the property by which living systems can transmit information instantaneously, so every bit knows what every other bit is doing, and the holistic nature of any living organism arises at a quantum level due to this connectedness.

3. The probable existence of super conductivity at body temperatures.

4. The probability that water acts as the information carrier and storage system for the quantum software.

Recent theoretical physics work on the replication of DNA, which is the fundamental genetic material, makes it inevitable that the body must work as a quantum computer as there are so many billions of possibilities of combination of various base pairs to make genes, that essentially the body would have to run through all those billions of possibilities, making billions of calculations in parallel. 99.9999% of all these calculations would yield a wrong answer, and only one would be right. It's only by this sort of awesome computing power that we can replicate DNA within minutes. If we didn't have this ability, it would take us several months to make a white cell. Whereas in fact it only takes a few minutes to make the genetic material in order to produce a white cell.

In energy terms, living systems are nearly 100% efficient. It takes a system with quantum informational characteristics to have such efficiency. Internal combustion engines have, at best, 30% efficiency.

How does all of this apply to Cancer Diagnosis?

The author of this paper, together with an Australian colleague (Peter Fraser from Sydney), had been working independently for some years and in the last 3 years together developing testing systems which look at the body from a quantum point of view. These are collectively called electro dermal testing systems which measure electrical changes over acupuncture points. The results are notably variable, changeable and have some degree of randomness. The reasons for all of this are explained in the previous paragraphs. The author has a patent on an objective way of doing this testing (UK Patent GB 2284889B entitled 'Skin Impedance Measurement Device for Determining the correct choice of Medication'). Peter Fraser has a range of intellectual properties and also has built an electronic model of the hydrogen atom which is fundamental to this work, both of these are patentable but are not patented at the present time. Electrodermal testing systems, to some extent, produce random results and that is directly connected with the randomness of quantum systems as described earlier in this paper. I have had a conventional statistical study done on

electrodermal testing techniques, using what is in our terms fairly crude electrodermal testing equipment, known as the Vega test, published as a leading article in the British Medical Journal on 25th January 2001, ('Is Electrodermal Testing as effective as Skin Prick Tests for diagnosing Allergies? A double blind, randomised block design study ' – George Lewith, Julian Kenyon et al). This study showed that this electrodermal testing system was not accurate in picking up these sensitivities.

Our Results and Testing for the Presence of Cancer using developed Electrodermal Testing Equipment

We have so far carried out two pilot studies using cotton wool tongue swabs on a 'blind' basis. The first of these studies involved approximately 100 patients, and yielded a diagnostic accuracy as to the presence of cancer or not of 90%. The second study involved 45 participants, and yielded a diagnostic accuracy of just less than 90% in detecting the presence of cancer or not. It is impossible to ignore the accuracy of these findings and the potential of the equipment used to make such findings. We wish to develop this equipment, with appropriate backing from scientists working in the area of quantum computing and quantum physicists, and state-of-the-art computer technology.

Peter Fraser has deduced through this testing a whole range of phenomena basic to the cancer process, and also a range of tantalising glimpses of completely novel ways of dealing with cancer. In essence, what has been found is that the body is described in physics terms as a quantum wave function. This means that it is a vast collection of waves all interacting with each other, the Interaction of one wave with all the other waves constituting a quantum wave function which makes a living system, is known as 'Phase'. The phase relationship therefore of these waves is fundamental and therein contains the information necessary to produce a human being or any other living system as a co-ordinated system. When an illness happens, the phase relationship in some way goes out of phase, so essentially any chronic illness in general, and cancer in particular, is a quantum software problem. It is my contention that when something goes wrong with our computers we look at the software, we don't take an axe to the back of the computer. In essence, the way that conventional medicine deals with cancer is to take an axe to the back of the computer. The therapeutic outcome of all of this work is we will begin to get glimpses into what the quantum software is , and be able to manipulate that in order to put the quantum wave function back into phase. This will produce absolutely total cure. In my own field of cancer work at the moment, I am using immuno therapy, which looks at the immune system to produce remission in cancer. This is totally different to the conventional approach, where the process of cell killing or removal of tumours through chemotherapy, radiotherapy and surgery, is the prime method. However, with patients who go through our immuno therapy programme, even though they seem to do better than using conventional approaches alone, are still so far as the testing systems we have used here in order to do our cancer diagnosis, are as likely to remit back into the cancer state as any patient treated conventionally. So therefore immuno therapy is a big step forward, but the real Holy Grail lies in the quantum software.

One of the most important phenomena discovered by my colleague Peter Fraser in relationship to cancer, is that there appears to be a problem with the hydrogen atom, in all patients with cancer. Hydrogen is the most common element in the universe , and is fundamental to biological systems, as all biological molecules have hydrogen. Hydrogen bonding is central to protein folding, enzymes are proteins, and the spatial form of any enzyme is fundamental to its normal activity. Hydrogen bonding is also essential in order to enable new DNA to be made, a process known as DNA replication. In cancer, the hydrogen atom goes through an energy shift to a higher energy level. This is known as the 'Lamb Shift'. This is described by a physicist called Lamb in 1947. The Lamb shift can be looked up on the Internet, and it states that it is due to activity in the virtual realm, that is the realm of the vacuum, in physics terms that is the background radiation which is present throughout the universe in which particles are created and destroyed in nano seconds. This virtual activity in the cancer situation pushes the hydrogen atom up through a Lamb Shift which can be detected using a spectrometer to a higher energy level. This means that in cancer, enzymatic activities are abnormal and DNA replication is also abnormal, which is actually what we find in conventional terms. Cancer is also a high energy process. For example, there is increased light emission from the body and in particular from tumours of patients with cancer, this is well described. Also, there is increased heat emission from cancer patients. When patients die with cancer, they go through a progress of gradual fundamental organ failure, particularly the liver and the kidney, and this process is known as cachexia. This in physics terms is a very slow and inexorable self combustion due to the high energy cancer state. Cancer causing phenomena such as ionising radiation, positive ionisation caused by man made electricity, toxins etc., are all of high energy status. Complementary cancer therapies which are becoming more popular, have tended to focus around aromatherapy, massage, counselling etc. These are basically all sedating techniques from a therapeutic point of view. This is exactly why one would expect them to work from a physics point of view, and indeed they do seem to produce some improvement in the cancer process.

SUMMARY

We have developed a prototype system for looking at the body as an information system based upon quantum computing ideas. We have been able to produce accurate results on a 'blind' basis. We've also been able to produce diagnostic insights and indeed therapeutic insights into the treatment of cancer, and a range of other chronic diseases. It is our belief that if this system is developed in its totality then we can produce commercial hardware and software if we have a small full time team operating within the UK over a period of 4 years.

Dr. Julian Kenyon, February 2001.

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