WHITE PAPER

A MAJOR ADVANCE IN PHYSICS (beyond the Standard Model) contributes solutions to a number of medical problems of significance.

These advances relate to the majority of known Cancer types – a number of diseases the profession find difficult to treat – also the mechanism and treatment needed to ameliorate Drug & Antibiotic Resistance.

Presented by
Robert G. Wood-Smith & Partners (2002)
Authoritative Advisers in Radiation-induced Genomic Instability.
Full postal Address¹: page 10.

Robert Wood-Smith
Senior Partner:
Consultant in
Advanced Nuclear Physics (medicine).
Radiation-induced Genomic Instability.

Associate Partner: Malcolm Hooper Ph.D., B.Pharm., C.Chem., MRIC., Emeritus Professor of Medicinal Chemistry.

In grateful recognition of the significant contribution made by –
H. Rosalie Bertell Ph.D.,
Environmental Epidemiologist.
Associate Partner: March 2009 – died 14 June 2012.

Email.

Professionals only –
please state to Medical Division, or Physics Division lightspeed.med.resh@btinternet.com

The White Paper outlines a number of major advances in nuclear physics.

Derivatives of 'Section Two' are shown to provide much needed advances in nuclear medical physics.

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General Introduction.

This White Paper presents a number of important developments in quantum physics, certain aspects of which are beyond the Standard Model. The fundamental gravity photon (fgph) has been identified: the numbers of fgphs which make up the primary subatomic particles, *i.e.* protons, neutrons, and electrons, have been calculated. Each fgph is known to carry specific electrical data, within the electric particle 'field energy' of each photon. The advances made subsequently in nuclear *medical* physics, provides a suitably detailed solution to a number of serious health problems.

It has become certain – the speed of light is not as previously thought a universal constant. A development in astrophysics contributed by an international scientific team, has provided evidence by which it can be understood – if or when the 'universal upper limit' for the speed of light is exceeded, massive stellar objects cease to exist within the space-time of our universe (evidence for which is detailed within Section Two). Thereby it can be observed, the speed of light is critical to the natural existence of matter. Where 'living tissue' is concerned – any variation below the correct 'field energy' speed c, which takes place within the electric particle 'field energy' speed of atoms forming human tissue, introduces a potentially lethal effect upon the subatomic data of DNA and/or RNA. When this takes place, those patients concerned become induced by a serious problem of a type which the medical profession acknowledge to be difficult or seemingly impossible to treat.

Normal subatomic vibrations operate within a standing wave at the speed of light c, the velocity of the **field energy** of which is 299,792,458 metres per second within the spacetime of our galaxy. Conversely it is known that an infringement of the speed of light c occurs within the radioactive emissions of alpha and beta particles, in that their particle 'field energy' travels at <u>less</u> than c: gamma particles have *also* been observed to travel at less than c, by an almost indiscernible margin - (Refer item 23. pages 150-51). Low-level radioactivity (formed by the latter named particles) is acknowledged to be widespread within the natural environment. Toxic chemicals are known to damage the DNA and RNA: this occurs by way of electrical interference, via a mechanism which is now understood to reduce the otherwise natural ability of the DNA/RNA to resist the distortion of its data by radioactive radiation even at low-levels.

The slower 'field energy' speed carried by radioactive radiation, can cause living tissue (including all biological systems and particularly DNA/RNA) to become unable to transfer accurately their data to other forms of matter. Such an information mismatch will have serious consequences for the way in which biological systems operate: especially is this the case when associated with an abnormal disease disorder within these systems.

It is now known how to correct for this energy data mismatch, by using electric particle 'field energy' at the speed of light *c*, or *where appropriate* the utilization of light itself – thereby restoring the biological systems' DNA and/or RNA to the healthy state associated with normal functioning. 'Section Three' will present in suitable detail the known successful applications of this new knowledge, in connection with the understanding and treatment of generally intractable diseases, including Cancer. This White Paper will *also* throw light on drug-resistant infections, antibiotic-resistance – including NDM-1.

Preface.

1994. Consultant Robert Wood-Smith (RWS) may have been the first to understand the electron had components, also their values. When applying this knowledge with selected known physics, the formula for gravity was formed. He was thus enabled to explain for the first time in the history of science, the source and workings of gravitational energy.

1995. The above highly advanced knowledge of quantum gravity, indicated the proton, neutron and electron are comprised of an immense number of fundamental gravity photons, having normally a 'field energy' displacement-in-time at the speed of light *c*: each photon containing specific data, appertaining to the characteristic and activity of the *fundamental electric* gravity particle.

Within 'Section Two' of this White Paper will be found in suitable detail – independent corroborations appertaining to matters summarized within this Preface

1996. It was understood by RWS and independent collaborating scientist Albert Mantiziba BSc.(Hons.) Chem.Eng. – the speed of light is variable and has an *estimated* universal upper limit of 471,102,434 metres per second. [Supplementary Information on pages 140-141.]

<u>June 1996</u>. The knowledge of RWS was sufficient to predict: there are circumstances where the gravitational intensity of the primary black hole at the centre of a galaxy could become so immense, as to generate a position where the Law of Conservation¹⁸ determined (*by an ultra-minuscule degree*) the speed of light to be beyond the universal upper limit. This will create a phenomenon that would cause matter and radiation associated with such a galaxy, to cease its existence within the displacement-in-time factor applicable throughout the universe.

<u>September 1996</u>. An international collaboration of astrophysicists has revealed within their published evidence (*details are provided within 'Section Two'*) the existence of 'holes in space up to one hundred million light years across': these are holes in space which do not appear within the COBE sky map of the early universe. Such residual holes in space indicate where (*in the past*) there would have existed *logically* an entire galaxy.

Oct-Dec 1996. With the above advance in science suitably corroborated independently, RWS was then in a position to postulate and thus it could be understood –

- (i) When the Law of Conservation (LoC) has detected in the past a galactic electric particle 'field energy' *minutely* in excess of the universal upper limit for the speed of light c, this caused the elimination of that galaxy from the universe. ['Section Two' provides independent scientific evidence corroborating this on-going reality.]
- (ii) In parallel it would *also* be appropriate to state in the event of atoms comprising living tissue becoming energized electrically at **less** than the speed of light c, there would be significant implications for the understanding of medical science: in that the speed of light c is shown to be critical to the maintenance of normality where matter is concerned. ['Section Three' of this White Paper provides detailed support, together with independent university corroborations.]

From 1997 forward and for periods of time – research was carried out by RWS in order to ascertain if, where and by whom, medical treatments and/or university trials were operating where the *modus operandi* when treating electrically abnormal pathogens responsible for

Cancer, could be identified precisely with the advance in nuclear medical physics known to this Partnership.

Up to 95 per cent of primary cancers are electrically abnormal. New and highly efficient treatments have been independently clinically trialled, with efficacious rates of success for up to 95 per cent of the patients concerned. [A more widely known treatment operates with a success rate average which is acknowledged to be *only* 40 per cent: this low rate of success is associated with the problem of ionization, consequential to the *needlessly* highly energetic nature of the energy being applied. [Further information is to be provided within an appropriate context, in 'Section Three'.]

A parallel form of treatment has been demonstrated to be remedial for the treatment of AIDS: knowledge of the successful clinical trial remains (as yet) suppressed by a vested interest. There are positive indications that appropriate treatments could be designed for Alzheimer's disease, vCJD, Motor Neurone Disease, Multiple Sclerosis and Parkinson's: also the conditions associated with H1N1 and H5N1, 'drug and antibiotic resistance', and the critical health condition NDM-1 which has become a major and growing concern to the profession worldwide.

This WHITE PAPER aims to meet a number of requirements.

It will be shown to be necessary that vital aspects of the White Paper require the medical profession and its patients to move on – beyond the current understanding of the Standard Model.

Medical derivatives of the new knowledge within 'Section Two' and their applications, are set out within 'Section Three'.

In the event of vested interests adjusting their viewpoint: medical science can undoubtedly be placed in a much improved position, both medically and financially.

'SECTION ONE': contains necessary levels of background information.

'SECTION TWO': is devoted to the presentation of nuclear physics beyond the

Standard Model. Corroborating published evidence, is provided by respected independent research organizations.

'SECTION THREE': presents medical derivatives appertaining to the above

advances in nuclear physics. Suitably detailed knowledge is provided, associated with independent medical trials.

The results can be exceptional. Up to 120,000 of the *more than* 150,000 Cancer patients who die each year in the UK, could be saved: the same may be said for up to *in excess of* 6,000,000 of the 8,000,000+ who die worldwide each year from this disease. Other major health problems including drug and antibiotic resistance can be shown to find their solution, in association with direct parallels which are

clearly relative to the same advances in nuclear medical physics.

In the circumstances it is prudent for the knowledge within this White Paper to be a relatively 'easy read' for members of the medical profession, whose knowledge of physics *in many instances* is likely to be less than would apply to the subjects of biology and chemistry.

As a courtesy to physicists: a blue typeface is to be employed, to indicate those aspects of knowledge which (*in part or entirely*) reflect subject matters beyond the Standard Model. Failure on our part to indicate the latter position, would allow needless opportunity for misunderstandings which, in certain instances, may have serious consequences for the lives of patients.

Background information concerning **H. Rosalie Bertell PhD.**, *eminent* Environmental Epidemiologist². **Malcolm Hooper PhD.**, **B.Pharm.**, **C.Chem.**, **MRIC.** Emeritus Professor of Medicinal Chemistry, University of Sunderland³. **Robert Wood-Smith: Senior Partner.** Consultant *in* Advanced Nuclear Physics & Radiation-induced Genomic Instability⁴, is presented on pages 10-16.

Rules generally considered applicable to scientific and/or medical papers are not to be considered sacrosanct, if or when such a form of presentation entails a code of authorship which is detrimental to the needs of an all embracing readership and/or the understandings and governance associated with advances beyond the Standard Model required in medical treatment(s). This reference concerns standard policy making which was not in a position to take into account at the time of inception, the special needs required when considering the presentation, reception and comprehension by a wide audience, of a number of advances in nuclear medical physics beyond the Standard Model entailing future 'matters of life or death' for millions of patients worldwide.

SECTION ONE.

ESSENTIAL BACKGROUND INFORMATION.

Abstract.

A number of significant advances in nuclear physics which are greatly needed but beyond the Standard Model, require to be presented and understood – prior to those in medicine becoming placed in a viable position to comprehend certain realities, associated with the underlying cause at a fundamental level which apply to such serious health problems as AIDS, Alzheimer's disease, vCJD, <u>Cancer</u>, Motor Neurone Disease, Multiple Sclerosis, Parkinson's disease, H1N1, <u>H5N1</u>, 'drug and antibiotic resistance' and especially the <u>NDM1</u> resistant gene, which has the capability to 'remove the last resort' available to the medical profession where a number of diseases are concerned.

A platform of background knowledge is to be set out within this 'Section One', outlining suitably a significant scope of matters which are described in appropriate detail within 'Section Two' and 'Section Three'.

1. When presenting this White Paper we have taken into careful consideration the information provided by the Journal of Biological Physics and Chemistry: also the 'Extended Mission Statement' by the Collegium Basilea (Institute of Advanced Study) which commences — The statutory mission of the Collegium Basilea is "the promotion of independent scientific research, above all in the fields of Biology, Chemistry and Physics, for which, by reason of its transdisciplinary or innovative nature it is difficult to find support elsewhere. The research results shall be made generally available."

The statement concludes constructively: Therefore, the Collegium Basilea sees its mission as primarily promoting map-making and bridge-building in the complex world of contemporary investigation, encouraging a common language between specialists, and above all to uphold critical, independent thinking in an age of unthinking convergence towards uniformity. Through its international network of members and associates, the Collegium can draw on intellectual reservoirs of great depth and breadth, and will constantly strive to combine insight, knowledge and original thinking to create new opportunities for incisive research. Jeremy Ramsden, President of the Collegium Basilea.

The abbreviated guidelines for authors draws attention *by implication*, to the undoubtedly *singular* position that exists for the author – who is invited to present highly advanced levels of knowledge in science and medicine – while seeking to apply the accepted standards of review journals: the latter a process which did not have in mind initially a position such as that described within the following pages.

The true position at this stage reflects certain realities, associated with **two closely** associated but different categories:

- (a) **Significant advances in nuclear physics** which logic and common sense acknowledge, are beyond the Standard Model. Reference is made to new knowledge at fundamental levels; corroborated suitably in vital respects by independent research evidence, which has been published by some of the most prestigious research organizations known to the scientific community.
- (b) **Medical derivatives** made possible by the above advances in physics have enabled new understandings to be developed by this Partnership. Our further researches ascertained subsequently, new methods of treatment (in close parallel to our more detailed understandings) which have been applied independently within medical trials carried out in one case by a university research team, and in another by a university college each of these within the United Kingdom. The efficacious results of these clinical trials when treating different forms of Cancer, have provided efficacious success rates of up to 95 per cent. [Details of which are presented within 'Section Three' of this White Paper.]
- (c) However before the underlying science can be published widely for the guidance of the medical profession: the establishment need to agree to examine knowledge beyond the Standard Model, in such a manner as to be prudent. It is recognized that although the knowledge will be shown to be well corroborated, the extent of the advance(s) will call for detailed studies.
- (d) The unfortunate reality reflects at this time as a consequence of previous insensitive and close-minded attitudes of mind within the establishment –

critical needs have continued to be set aside, where the review of advanced nuclear medical physics beyond the Standard Model has been concerned. It is hoped that publication of this White Paper may contribute to resolving this longstanding position, which can be shown to have resulted indirectly in the needless deaths of millions of patients worldwide during the past decade.

Clinicians in the United Kingdom have indicated that less than 1% of 300,000 patients per year who would benefit from receiving one of these new treatments *i.e.* Photodynamic Therapy (PDT): this "despite the National Institute for Health and Care Excellence (NICE) approving the use of the therapy for cancers such as skin, mouth, oesophagus, head and neck". We are also aware: lung cancers are being treated successfully (as yet in only modest numbers).

In a *published article: an estimated **loss in potential clinical cost savings** to the National Health Service in the UK, has been estimated at "between one to two billion pounds a year". [*A PDF copy has been provided for the journal Editor.]

In addition: the author of this White Paper and his Partners were invited by Geoff L. Ridgway MD, BSc, FRCP, FRCPath, Senior Medical Officer, Infection Control & Blood Policy, Department of Health, London, on behalf of Sir Liam Donaldson, the Chief Medical Officer – to provide in 2008 a detailed report on another new treatment, *referred to in item (b) above*.

In the latter respect the findings of this Partnership underpinned:-

- (i) A university medical trial that involved nearly one hundred patients and more than two hundred cancers of a type considered previously to be untreatable. The efficacious rate of success associated with this *relatively* new treatment, has been proven to be 95 per cent with little or no side effects. [Suitable details are presented within 'Section Three' of this White Paper.
- (ii) This Partnership indicated within the latter report: the treatment would prove practical for an estimated *five million of the eight million patients who die worldwide each year from Cancer.

[*We have since revised our estimated figure – to *in excess of* six million potential lives may be saved each year *including the PDT treatment*. More than this however will be possible, when new medical equipment (we will advise on for the treatment of most remaining types of Cancer) has been designed, trialled and made available to the medical profession.]

Progress has been stalled by the inability of the establishment to consider proposals for a 'Select Committee of eminent scientists', to review the advance made in nuclear medical science that explains clearly and supports the proposed new treatment(s). [The Partnership is a not-for-profit organization.]

2. The position at this time. The author and his Partners possess a finely detailed understanding of the underlying cause and treatment, of those serious health problems which are now understood to have an 'electrically abnormal pathogen' as their cause. The most widespread of these diseases is Cancer: independent clinical trials by respected medical research teams – utilizing methods of treatment which have the effect of regularizing the subatomic electric particle 'field energy' to the correct speed – have confirmed efficacious rates of success commonly up to 95%. [Significant levels of suitably detailed knowledge are provided within 'Section Three' of this White Paper.]

The Partnership is in a position to explain, the underlying cause and treatment for 'drug and antibiotic resistance': with respect, there is no reasonable doubt concerning this. In 2008 we prepared a report headed 'Medical Science is in Crisis, Worldwide', predicting the on-going development of antibiotic resistance. We have indicated since to the World Health Organization, an intention to prepare further knowledge indicating specifically the underlying cause and treatment of the NDM-1 resistant gene. 'Section Three' of this White Paper presents the knowledge required.

3. Vital aspects of the significant advance(s) which this Partnership have made in nuclear physics, has been corroborated by some of the most prestigious research organizations known to the scientific community: suitable details are provided within 'Section Two' of this White Paper commencing on page 17. When presenting knowledge for the medical profession (conveying medical derivatives of the latter science) we have prepared documents which are sensitive to the realization: (i) a majority of members of the medical profession are significantly more familiar with biology and chemistry than with physics, also (ii) the physics referred to here are advanced – either in part or entirely beyond the Standard Model.

In the latter context, Professor Sir Peter Knight, President of the Institute of Physics was quoted in the relatively recent past, when he conveyed: "Physics A-level should be made prerequisite for students who want to be doctors." "...the subject underpins many techniques used to diagnose illness and disease."

With the above position in mind:

- (a) We continue to prepare our reports as an 'easy read': this by way of courtesy to those who are non-physicists. [In our view, there is little value in simply being correct, only in being understood: especially when the lives of so many patients, depend on readers within the profession achieving a sufficient understanding of the science concerned.]
- (b) Matters appertaining to nuclear medical physics beyond the Standard Model are presented in a blue typeface. [Should we omit to do so, physicists may consider mistakenly that *here and there* an error is being made, when in reality we are presenting a facet (*be it sometimes only in part*) associated with an advance made within a grey area of nuclear physics certain aspects of which at this time, are beyond the Standard Model.]

4. PEER REVIEW.

- (i) In the past RWS (the author) advised one of the Partners, that he considered there would be a problem, if he was to present a case for peer review: in that the review process is tailored to confine support to physics within the Standard Model. Certain vital areas of the advances made in nuclear physics have remained to date beyond the Standard Model. This has been allowed to occur, even though highly prestigious research organizations have published (subsequent to our findings) corroborating evidence which quite clearly (be it indirectly) provides hard evidence that our findings are correct. [Some of the latter research organizations have stated 'new science would be needed to explain their evidence and findings'. Those concerned were not in a position to appreciate they were referring to 'new science' we had written some time before their evidence was published, or we had even yet to learn they were carrying out research in the precise field which applied.]
- (ii) The journal 'Nature' agreed to review new knowledge presented by my colleague Albert Mantiziba BSc.(Hons.) Chem.Eng. However we were to learn in due course, their reviewer removed all of the corroborating evidence published by some of the most prestigious research organizations known to the scientific community. I made a 'formal complaint' to the Editor: he replied indicating he considered we should 'present our case again as 'a matter of urgency': he suggested however, this should be 'to another review journal'. I considered at the time: (a) this was an indication he would not know to whom such knowledge beyond the Standard Model could be presented for review, and (b) the reviewer in this instance was not prepared to put his head above the parapet.
- (iii) At a later time and in due course after reading *an earlier* 'White Paper' from this Partnership: a Deputy Director for the Department of Health, London, wrote to the author of the *latter earlier* paper on behalf of the Secretary of State for Health and the Chief Medical Officer: "I have read with interest your White Paper and noted your suggestion that a Select Committee of Scientists be established to review the evidence.....for the treatment of electrically abnormal radiosensitive pathogens." The letter went on to suggest we approach in this respect the Medical Research Council (MRC).
- (iv) We conveyed to the MRC documents including a report requested previously by invitation of Geoff L. Ridgway MD, BSc, FRCP, FRCPath, Senior Medical Officer, Infection Control & Blood Policy on behalf of Sir Liam Donaldson, Chief Medical Officer, Department of Health, London, United Kingdom.

The MRC conveyed subsequently their opinion – there is no science that is not already known to eminent scientists whom they could ask to review any science presented, therefore they would not consider making an adjustment when reviewing that indicated to be nuclear medical science beyond the Standard Model. [May one add: it is to be questioned whether the report was in fact

read in detail. If it was: either the reader was very limited in their knowledge of physics, or, may be viewed as insensitive to the needs arising.]

A member of the profession on learning of MRC's standpoint, commented, "There **are** matters which we do not yet understand." Another conveyed the MRC viewpoint amounted to one of "arrogance".

(v) The standpoint of review journals we have communicated with earlier, has the appearance of reflecting 'an on-going position' initiated in 1893: a time when influential scientists of the day formed the view – there was no science that was not already known and therefore, there would always be an 'equal' or 'authority' to review any science presented. This would appear to have been the period, in which the peer review process originated. Too little has changed since that time: except it has been said by a philosopher, 'The only thing we learn from history is that we learn nothing from history.'

Additional Information

- 1. Robert G.Wood-Smith & Partners (2002), P.O. Box 7080, Halstead. CO9 1WE United Kingdom. A not-for-profit organization.
- 2. The Curriculum Vitae of H. Rosalie Bertell PhD., is available for inspection on the website http://www.ratical.org/radiation/inetSeries/RBcv.html. Dr. Bertell's relationship with Robert G. Wood-Smith & Partners commenced during the year of 2004: she became an Associate Partner in March 2009. In this position Rosalie continued to contribute to the knowledge and support of the Partnership, until her death on the 14th June 2012. We owe to her a debt of gratitude, for the knowledge and support which she remained always so willing to provide.
- 3. Malcolm Hooper: Emeritus Professor of Medicinal Chemistry, University of Sunderland.

Short Curriculum Vitae:-

- B Pharm. degree from the Faculty of Medicine, University of London, 1956.
- PhD. from the Faculty of Medicine, University of London, 1959.
- Appointed Lecturer in Pharmaceutical and Medicinal Chemistry in 1959 and then Reader in 1969.
- Appointed Professor of Pharmaceutical and Medicinal Chemistry, March 1982.
- Taught students of pharmacy, pharmacology and pharmaceutical and chemical analysis at honours degree level.
- Directed research at Masters and Doctoral level, supervising PhD students.

- Served as an examiner in UK universities at graduate and postgraduate level; has also served as examiner at universities in India and Tanzania.
- Has published some 50 papers in peer-reviewed journals in the field of medicinal chemistry and has edited a book on medicinal chemistry.
- Acted as referee for a number of scientific journals and has served on an editorial Board.
- Served on Committee of the Council for National Academic Awards and also of the World Health Organisation.
- Is a member of a number of learned societies, including the Royal Chemical Society and the British Pharmacological Society. For over 12 years he was on the committee of the Society for Medicines Research and served as Chairman for two years; this involved the planning and organising of major national and international conferences.
- Appointed Chief Scientific Adviser to the Gulf Veterans Association and has submitted
 evidence to the Select Committee on Defence also serves on the Gulf Support Group
 convened by the Royal British Legion.
- Professor Malcolm Hooper became interested during 2002, in the advance of nuclear medical science projected by Robert G. Wood-Smith & Partners. He was later to become an Associate Partner: a position which he is pleased to continue to serve, in this not-for-profit organization.
- 4. **Robert Wood-Smith** (RWS) Senior Partner, Robert G. Wood-Smith & Partners (2002). The following provides relevant 'background knowledge': a sequence of mostly notable events up to the present time.

1951-88: operated as a Consultant in Business and Industry, up to immediately below that of the government(s) of the day.

1956-91: studied the work of the human mind to an authoritative level.

1994: RWS retired from the business scene: providence, it would seem, saw otherwise.

In November of 1994: RWS understood and predicted the electron had components, also the values of these. [Corroboration was provided by the **1998 Nobel Prize in Physics**, awarded to three scientists in the United States of America for their confirmation of the existence of components to the electron.]

1994-5. Drawing upon the above advanced knowledge of the electron, together other known physics: RWS ascertained he was in a position to formulate gravity, also the source and workings thereof. [Within 'Section Two' of this White Paper (commencing on page 17) there are a number of independent corroborations, provided by research organizations of note, appertaining to vital aspects of the findings of RWS – based on

his development of a true understanding of the formula, source and workings of gravitational energy. IT IS RELEVANT TO ADD: major advances in subatomic nuclear physics which he has since been in a position to predict, were perceived and later proven to indicate a <u>number of derivatives associated with significant medical applications</u>.]

Albert Mantiziba BSc.(Hons.) Chem.Eng. (formerly with British Oxygen) commenced during 1995-6 a period of close co-operation with RWS, assisting in the development of derivatives appertaining to the source and workings of gravitational energy. Some 300 pages of detailed notes were placed in writing, providing reference and support for the preparation of an eventual manuscript to be headed 'The Ultimate Theory of Everything'.

[It is appropriate the reader be informed at this stage: it had not been understood by Robert Wood-Smith (RWS) during his earlier years, that his eventual 'authoritative knowledge' of the work of the human mind would (from 1994 forward) enable him to comprehend the manner in which Albert Einstein carried out his Gedanken (thought) experiments. By virtue of this unusual level of knowledge – during the period from late 1994 to 1996 – the understanding by RWS of the formula, source and workings of gravity were much enhanced. Derivatives of which, provided knowledge beyond the Standard Model, associated with the subjects of light, relativity, space and time.]

June 1996: was to see the development by RWS of a highly advanced understanding of the most advanced fundamental physics: *that is*, the science appertaining to the properties and interactions of the speed of light, energy and matter – in particular, when and where the speed of light c was to become infringed.

RWS realized, there were *significant implications for medical science: sufficient to justify a decision to 'set aside' (*until a later time*) presentation of the formula, source and workings of gravity – in order to give priority to 'specific derivatives', presenting 'new scientific knowledge' appertaining to nuclear 'medical' physics beyond the Standard Model.

* 'SECTION TWO' of this White Paper provides evidence published in the journal 'Science' **September 96** — wherein an international co-operation of astrophysicists released new scientific findings: one aspect of which, was to corroborate a prediction made by RWS in **June 96**. The reference here is to 'highly advanced physics': specific matters, which resulted in his decision to give 'priority' to the needs of the medical profession and its patients. THIS WAS A SERIOUS CONCLUSION: one which he perceived, could be drawn from the published evidence.

The associated advanced underlying fundamental physics (which RWS understood in fine detail) pointed to life-threatening consequences, that would result *in specific instances* where the electric particle 'field energy' speed comprising atoms of living tissue, would become adjusted to a 'field energy' speed which was **less** than that of light c. RWS perceived the latter to be an abnormal electric particle state: one that would introduce serious health conditions which the profession would find difficult to understand and thereby treat.

1996-2007. RWS carried out research to ascertain knowledge of new medical treatments: one or more of which might benefit from drawing support from the technical understandings, that could be provided by way of an appropriate knowledge of the nuclear medical physics which he and his Partners continued to develop. Over a period of time – RWS ascertained a small number of subsequent independent published advances, which he understood were associated with underlying evidence of physics beyond the Standard Model: advances in medical treatments that served to corroborate the highly advanced nuclear science comprehended in fine detail by Robert G. Wood-Smith and his partners. Corroborative medical findings have been published by respected independent research teams, associated with United Kingdom universities: knowledge of which is conveyed within 'Section Three' of this White Paper, commencing on page 47.

2008: RWS was now in a position to present to Sir Liam Donaldson, *Chief Medical Officer, Department of Health (DoH), London, UK.*, a report headed, 'Medical Science is in Crisis, Worldwide'. Subsequent to reading the latter document – Geoff L. Ridgway MD, BSc, FRCP, FRCPath, (Senior Medical Officer, Infection Control & Blood Policy,(DoH)) wrote to RWS on behalf of Sir Liam, inviting the presentation of five detailed reports. *Additional information is provided within 'Section Three', appertaining to the first of these: the subject, 'Microwave Therapy for the Treatment of Cancer'. The latter report presented the underlying science in support of a United Kingdom university medical trial, associated with a new and advanced treatment of Cancer. The efficacious rate of success when treating nearly one hundred patients and more than 200 tumours (considered previously untreatable) proved to be 95 per cent.

[*The above named report provided nuclear medical scientific reasons, supported by independent medical evidence, indicating the treatment would prove suitable for an estimated *five million of the eight million Cancer patients who die worldwide each year. *We have adjusted subsequently the latter figure, to in excess of six million p.a. including patients treated with Photodynamic Therapy. A copy of the original report has been provided for the Editor of the 'Journal of Biological Physics and Chemistry'.]

2010: a Deputy Director for the Department of Health, London – wrote to RWS on behalf of "the Secretary of State for Health and the Chief Medical Officer, regarding a White Paper of potential significance for medicine, government and the people". RWS was recommended therein to seek the interest and support of the Medical Research Council (MRC) in the United Kingdom, and to convey the request that "a Select Committee of Scientists be established to review the evidence...for the treatment of electrically abnormal radiosensitive pathogens." A spokesperson for the MRC indicated subsequently, a medically insensitive and *surely* closed-minded 'opinion' – suggesting there was no new science that was not already known to scientists, upon whom they could call to review any science presented. The latter 'opinion' is refuted by clear independent evidence to the contrary, contained within this White Paper.

[In 1893: the consensus of 'opinion' of eminent scientists of the day (which gave rise to the eventual 'peer review process' now in use widely) was not dissimilar to the latter 'opinion' of the spokesperson for the MRC. Science has managed to progress – at

times with great difficulty – none greater than is the case today, when presenting new knowledge beyond the Standard Model. **The existing procedure for review** entails calling upon an equal or authority to review the science presented: with respect, there can be neither an 'equal' nor 'authority' to review highly advanced physics beyond the Standard Model. For the latter reason *and as indicated above*, a Select Committee of Scientists needs to be established to review the science and evidence to which we refer.]

2012: on behalf of the Partnership, RWS prepared (as stated) a report in 2008 headed 'Medical Science is in Crisis, Worldwide'. The substance of that document contained the prediction – "'Antibiotic resistant' infectious diseases present a significant threat to medical services worldwide.' "The report detailed aspects of the underlying nuclear medical physics: knowledge which is beyond the Standard Model. The Partnership has provided since, an undertaking to a senior officer for the World Health Organization in Geneva: indicating we would prepare further knowledge – detailing the mechanism and treatment of the NDM-1 resistant gene, which has spread to many countries and threatens to make a number of infectious diseases seemingly impossible to treat. Suitable knowledge is now presented, within 'Section Three' of this White Paper.

3rd May 2012. The following 'well-founded statement' by Sir Peter Knight (*published recently*) has greater implications which RWS and the Partners considered at the time a need to share with him. We repeat here from a published report: "Physics A-level should be made prerequisite for students who want to be doctors." "Professor Sir Peter Knight, President of the Institute of Physics, indicated the subject underpins many techniques used to diagnose illness and disease." Suitably detailed knowledge has since been provided for the consideration of the President of the Institute of Physics in the United Kingdom.

Reference has been made *herein* to the need for a Select Committee of eminent scientists to examine the science and evidence – thereby to meet *also* in face-to-face 'question and answer' session(s) with suitable members of the scientific partnership / carry out further tests if thought necessary / and then to publish their findings for the guidance of the medical profession and its patients.

Should the need for an adequate professional examination of nuclear medical physics beyond the Standard Model remain outstanding, this Partnership on behalf of the medical profession its patients, will feel bound to seek a Government Inquiry - or if necessary, a Royal Commission.

August 2012. A matter of education.

Until he retired in 1994, Robert Wood-Smith (RWS) had not been drawn in great detail towards the subjects of physics and medicine. A *singularly unusual* level of new knowledge acquired by RWS subsequent to his retirement, was made the subject of a diligent appraisal by independent scientist Albert Mantiziba BSc.(Hons.) Chem.Eng., from November 1994 until January 1995 – appertaining to the 'formula' for gravity prepared by RWS (*matters that were to prove to be a 'first' in the history of science*). Albert stated January 1995, "I have tried to destroy the formula with sound physics.

All I have been able to do - is to confirm it is correct." A question was then raised: "How can it be that Robert understands these matters, bearing in mind he did not attend a university?" The scientist replied: "Had Robert been trained as I was trained, he would not have understood the science which he has. He would have been trained in those 'grey areas' of science, which have hidden this. Robert has a logical mind and has separated the wheat from the chaff."

ONE MAY ADD TO THIS: RWS has an authoritative knowledge of the work of the human mind. This has enabled him to participate in a process of understanding, which Albert Einstein referred to as Gedanken (*thought*) experiments.

(i) Albert Einstein's discoveries were not the result of laboratory experiments, the knowledge he provided for science and mankind was gained from the utilization of Gedanken *thought* experiments. Robert's knowledge of the work of the human mind and thereby the latter process is very highly advanced, indeed authoritative.

IT IS RELEVANT TO ADD: the second scientist to show interest in Robert Wood-Smith's findings, was Professor Peter Bergmann: who worked as a close colleague to Albert Einstein for the latter part of Einstein's lifetime – during which period they searched for the formula, source and workings of gravity. Bergmann (when informed of the research findings developed by RWS) on August 5th 1995 wrote to Robert Wood-Smith, "I shall be glad to receive a copy of your forthcoming report which you are planning to submit to the Royal Institution of Great Britain." [A copy of Peter Bergmann's letter to Robert Wood-Smith, can be made available.]

(ii) The predictions made by RWS have become corroborated by some of the most prestigious research organizations known to the scientific community. The reader will become aware when reading 'Section Two' of this White Paper – RWS has understood clearly and in detail for several years, the underlying physics associated (by way of one example) with the content and output of the Higg's boson. These are matters of nuclear physics largely unknown as yet to physicists: advanced fundamental physics which the Editor may desire to present to scientists at CERN and Fermilab – for their information, guidance, and comment.

Certain aspects of the latter physics enables vital areas of progress to be made in 'grey areas' of nuclear <u>medical</u> science: 'Section Two' and 'Section Three' of this White Paper will serve to explain and validate this statement.

(iii) IN TERMS OF MEDICINE – two independent university medical teams in the United Kingdom have applied (unwittingly) in medical trials, a manner of treatment which conforms to the advanced nuclear medical physics presented by this Partnership. Highly efficacious success rates for the Cancer treatments concerned, have been proven to apply in support of up to 95% of those patients treated. The potential future savings in costs to the National Health Service, can be measured in billions of pounds per annum.

IN ADDITION:

- (a) RWS indicated in 2008 the growing threat of antibiotic resistance which has emerged *since* as a serious and growing health problem worldwide, in the form of the NDM-1 resistant gene. The mechanism *and probable treatment* thereof, is now understood by this Partnership.
- (b) The Partnership understands *also* the mechanism and treatment for another major health problem that of drug resistance. The appropriate science indicates the resistance factor to be a treatable health condition.
- (iv) It is acknowledged widely, there exists a number of 'grey areas' in present day medical science. **Electrically abnormal pathogens** are understood by this Partnership to reflect the underlying cause of a number of major health problems: the mechanism of which is understood, and the manner of treatment proven. **The need has been to think 'outside the box'** together with logical and corroborated understandings, supported by evidence produced by respected research organizations both scientific and medical.

Robert Wood-Smith and his Partners invite a thorough and independent examination of matters presented within this White Paper.

5. 'MICROWAVE THERAPY FOR THE TREATMENT OF CANCER.'

A university medical trial indicated the efficacious rate of success when treating nearly one hundred patients and more than 200 tumours (considered previously untreatable) proved to be 95 per cent. An earlier report invited on behalf of Sir Liam Donaldson, when Chief Medical Officer for the Department of Health, London, England – headed 'Microwave Therapy for the Treatment of Cancer' – presented 'scientific reasons', supported by 'independent medical evidence', indicating the treatment would prove suitable for an estimated *five million of the eight million Cancer patients who die worldwide each year. [*The latter figure has been raised since, to in excess of six million p.a. including patients treated with Photodynamic Therapy.]

6. 'A ray of light can kill cancer cells without leaving terrible scars – so why are so few offered it?' – is the title of a published article by Jerome Burne: a contributor to 'Medicine Today' and one of Britain's leading medical health journalists.

We consider it entirely appropriate the reader be invited to consider the above article, which can be viewed by reference to the original – published in the U.K. 'Daily Mail' on the 13th October 2009.

An "UPDATED" report has been made available since on – http://www.dailymail.co.uk/health/article-1219948/A-ray-light-kill-cancer-cells-leaving-terrible-scars--offered-it.html [Alternatively, enter the first sentence of this item 6.]

The article includes an indication of the frustration of clinicians, who are being severely limited by the establishment in the use of an advanced new treatment, despite the approval

in this case of the National Institute for Health and Clinical Excellence. <u>The outstanding need where a number of new treatments are concerned</u>, is for publication of the advance in scientific knowledge conveyed in this White Paper within 'Section Two' – together with 'derivatives' of the associated nuclear medical physics conveyed as an 'easy read' within 'Section Three'.

SECTION TWO.

(a reference to this Section was made earlier on page 11).

NEW SCIENTIFIC KNOWLEDGE.

Abstract.

This White Paper continues with the presentation of a number of specific advances in nuclear physics which are beyond the Standard Model and *for this reason* have remained *until now* presented to a number of physicists, but have not *until the present time* been published. 'Corroborating evidence' is provided herein, that has been published by a number of respected independent research organizations of note.

The publication of these major interrelated advances in nuclear physics has been obstructed by an opinion among the review community, there is no knowledge beyond the Standard Model and therefore, no accommodation is needed to meet such an eventuality. This White Paper breaks with the former viewpoint which, to logically thinking minds, can be seen to be an ill-considered standpoint that has a negative influence upon the progress of science: one that presently can be shown to threaten needlessly the lives of a growing number of patients worldwide.

It is however acknowledged widely by the scientific community – that it lacks knowledge of the formula, source and workings of gravitational energy. The derivatives thereof, which are to be commented on herein, convey an introductory knowledge of the latter subject matter: knowledge which contributes a 'rock-like foundation' for aspects of fundamental physics and thereby *also* nuclear medical physics.

- (i) Predictions made since 1994-5 by this Partnership are expressed.
- (ii) Subsequent corroborations by prestigious independent research organizations are provided.
- (iii) Implications for science and advances in medicine are stated.

The reader is reminded, please, as a courtesy to physicists: a blue typeface is to be employed to indicate those aspects of knowledge which (*in part or entirely*) are beyond the Standard Model. Failure on the part of the presenting Partnership to indicate the latter position, would allow needless opportunity for misunderstandings which, in certain instances, could have consequences for science, and subsequently 'medical derivatives' reflecting matters of life or death for many patients.

It is prudent for the knowledge within this White Paper to be a relatively 'easy read' for members of the medical profession, whose knowledge of physics *in many instances* is likely to be less than would apply to the subjects of biology and chemistry.

Preface.

Subsequent to commencing an original line of investigation, associated in the first instance with the electron – the level of findings that accrued from researches carried out during an initial period of twenty one months, brought about an appreciation in the mind of Robert Wood-Smith (RWS) that a *change of course would be prudent.

*The latter was seen at the time as a requirement and priority – in order to support the need for a suitable presentation to be made, relative to the 'medical derivatives' forthcoming from the independently corroborated advances made in nuclear medical physics, which would require careful presentation for the guidance of the profession.

The items 1 to 6 within this 'Section Two' of the White Paper, convey a suitable enlargement of the above nuclear physics – providing new knowledge for scientists, coupled with those applications which reflect major advances in medicine.

Certain of the advances were outlined within a former White Paper: an 'Advisory Document for Physicists and Medicine', presented by this Partnership during the period October 2011 up to the first quarter of 2012. The White Paper you are now reading —will *in one respect* extend the scope of the former document, by way of reference also to those aspects of our findings which support and suitably enlarge upon the discovery of the Higgs particle presented by CERN in July 2012.

Physicists *and some others* who were prepared to give the time to consider the contents of the earlier White Paper, will be in a position to understand – this Partnership was aware *in detail* that atoms comprise something more than protons, neutrons, electrons, and their sub-atomic fractional electric charges. The electric particle content of an atom does not and cannot *of itself* account for the mass which has been attributed to atoms – <u>Supplementary 'Reference' Information on pages 19-47</u>.

For your advice, page 36 of the earlier named White Paper concluded:-

"Closing comment by author Robert Wood-Smith.

Item vii) DISPLACEMENT-IN-TIME on page 3, including items (a) (b) and (c) \sim followed by item viii) on pages 3-4, also item (c) on page 9 \sim will have provided the reader with an opportunity to perceive certain realities: which some may realize, have significant implications associated with the input of knowledge 'outlined' within References 11 and 17 \sim

(i) The displacement-in-time of electric particle 'field energy' at the speed of light c is known to be 'critical' to the existence of human tissue: also to all forms of matter and radiation.

- (ii) Furthermore, physicists understand: the electric particle energy of which atoms are formed, does not account suitably for the existence of solid matter. There is something else.
- (iii) The speed of electric particle 'field energy' is critical to human health also to the existence of matter, and that considered to be the hologram which presents it."

An initial outcome of nearly half a century of research has resulted in physicists at CERN announcing in July 2012, they had found a new subatomic particle consistent with the 'Higgs boson', which was believed to confer mass: a heavy particle with a sigma signal approximating to around 125-126 Gigaelectronvolts (GeV). The particle was reported to have been detected for less than a trillionth of a second, prior to dissemination into an immense number of ultra-minuscule fundamental particles.

CERN's Director General, Rolf Heuer indicated: "We have reached a milestone in our understanding of nature." "The discovery of a particle consistent with the Higgs boson opens the way to more detailed studies, requiring larger statistics, which will pin down the new particle's properties, and is likely to shed light on other mysteries of our Universe." [Updated June 2019: please refer to Professor Andy Parker, pages 152-153.]

A detailed understanding providing additional data and explaining the new particle's properties — can be shown to have existed *within a White Paper, presented by this Partnership, ten months before the July 2012 declaration by CERN of the Higgs boson. Knowledge which is to be elucidated further (in a manner which is now appropriate) within the highly 'advanced nuclear physics' which is to follow within this 'Section Two' of the current White Paper.

*As a point of reference:

a PDF copy of the earlier White Paper has been provided for the Editor-in-Chief of the journal publishing the document in the hands of the reader.

PHYSICS AND MEDICINE

have remained until recently a 'SCIENCE JIGSAW'.

For reasons that will become apparent, the need is to commence with the electron.

1. PREDICTION – Robert Wood-Smith (RWS) author of this White Paper realized in the last quarter of 1994, the electron had components; also (within a very fine margin) the values of these. RWS combined suitably this new knowledge with specific known physics: in so doing, he became the first scientist to comprehend in detail the formula, source and workings of gravity – subject matters considered the 'Holy Grail' for physicists. Professor Peter Bergmann (who was Assistant to Albert Einstein in their search for the above knowledge) wrote to RWS on 5th August 1995 inviting a copy of his proposed report to the Royal Institution of Great Britain. [A copy of Professor Bergmann's letter can be provided, where such a need is reported to us.]

CORROBORATION – On the **11th September 1997,** in 'Nature' | vol 389 | issue 6647 | pages 162-4 | a report was published from the "Braun Center for Submicron Research, Department of Condensed Matter Physics, Weizmann Institute of Science, Rehovot 76100, Israel" under the heading "direct observation of a fractional charge". Part of their research findings confirmed indirectly the prediction made by RWS in the last quarter of 1994, when they conveyed on page 163 last paragraph - having swept the magnetic field from zero to 14 tesla - "The two-terminal conductance exhibits Hall plateaux, expected in the IQH" (Integer Quantum Hall effect) "and in the FQH" (Fractional Quantum Hall effect) "regimes ($v = \frac{2}{5}$, $\frac{3}{5}$, and $\frac{1}{3}$ are clearly visible with a plateau width of ~1 tesla around $v = \frac{1}{3}$)".

In 1998: the Nobel Prize in Physics was awarded to Horst Störmer, Robert Laughlin and Daniel Tsui for their discovery that the electron is comprised of component fractional charges. [RWS is to present his original prediction of the 'values of the electron's components', within a future manuscript under the heading, 'The Ultimate Theory of Everything' - Part One (of three).] A further reference to the Nobel Award appears on page 54.

IMPLICATIONS – Knowledge of the values of the components of the electron, when applied suitably with other known *physics* data during 1994-6, enabled a detailed understanding of the formula, source and workings of gravitational energy to be prepared. In this connection RWS was joined by Albert Mantiziba BSc.(Hons.) Chem.Eng. (*formerly with British Oxygen*) who spent *initially* three months during 1994/5 "seeking with sound physics to destroy the formula"; prior to agreement to co-operate in preparing a written presentation, together with several derivatives.

2. THE FORMULA, SOURCE AND WORKINGS OF GRAVITY – provides an advanced knowledge of gravity, which indicates protons, neutrons and electrons comprise of an immense number of fundamental photons: these are the long sought after gravity photons. [Please note therefore, in association with Section Three of this White Paper – human tissue at its most fundamental level, is *also* thereby thus formed.]

PREDICTION – Robert Wood-Smith (RWS) who was later to become 'Senior Partner' of the organization presenting this White Paper – realized during 1995 (when drawing upon his highly advanced knowledge of the 'Gedanken' thought process) that *each atom was comprised of an immense number of ultra-minuscule fundamental electric particles. [A matter referred to again on page 43.]

*The above mentioned independent collaborating scientist Albert Mantiziba *and* RWS then realized – their **knowledge of quantum gravity** indicated quarks and quarkels would be found to comprise the energy of gravity. RWS discussed this with Mantiziba who, in July 1995 calculated with *indirect help from the Max Planck Institute (Max Planck, April 23rd 1858 – October 4th 1947):*

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the proton comprised 2.2674 \times 10^{23} fundamental gravity photons (fgphs) the neutron " 2.2705 \times 10^{23} " " " " " " the electron " 1.2349 \times 10^{20} fgphs: see also item 22. on pages 149-150.
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The above ultra-minuscule electric particles combine to form respectively the 'collective number' of + and - fgphs which form the quarks of the proton, neutron, and also the *quarkels of the electron. [*Quarkel is the name RWS gave in November

1994 to the fractional charges of the electron: since referred to by scientists as quarks.] Referred to on page 142. See also <u>Supplementary 'Reference' Information</u> item 17, page 148. [Updated June 2019: refer Professors Parker and Brink, pages 152-153.]

CORROBORATION – Within the journal 'Science' during February 1996, William Carithers of the Fermi National Accelerator Laboratory, Batavia, Illinois, USA, when reporting on a result – observed and stated, "This is just the sort of effect you would see if quarks were not fundamental particles, but had some sort of internal structure."

Chris Hill, theorist at Fermilab, added in 'New Scientist' | 11 May 1996 | page 29 | >> "It would suggest that whatever lies inside the quarks is incredibly tightly bound, in a way that theory can't yet accommodate."

On the **1st March 1997** in "New Scientist" | page 14 - results from DESY (the German Electron Synchrotron) pointed to the existence of that described as a "leptoquark". Robin Marshall of the University of Manchester who was involved in the work said, "The leptoquark is a bizarre object that we don't understand completely". Researchers indicated this "could mean that quarks and leptons are not fundamental particles after all, but are made up of even smaller particles." A reference to this pages 72-3. [Supplementary 'Reference' Information item 21. page 149, 04/09/2015.]

IMPLICATIONS – Knowledge concerning the absolute fundamental particles that are now understood to exist and the immense number of these, is bound to figure in the development of our understanding of the universe, gravitational energy, light, and the displacement-in-time of the electric particle 'field energy' which comprises variously matter and radiation. [Reference is made to the knowledge within this item 2 on pages 53, 87, 90, 121, 142.] Support from **LHCb Collaboration** appeared online 31/08/2015: refer to our <u>Reference 21</u>, on page 149.

THE HIGGS BOSON.

It is appropriate in the new circumstances of statements from CERN's Director General, Rolf Heuer in July 2012; this Partnership may now correlate the initial evidence published by physicists disseminating the information gained from the Large Hadron Collider (LHC) – together with the directly relative and contributive advances made in nuclear fundamental physics since 1994 by Robert G. Wood-Smith & Partners and those who were to become their Associate Partners (*including Rosalie Bertell PhD*.), together with a number of people whose co-operation and support has been of significant value.

Those scientists who have studied data from CERN concerning the Higg's boson, will be aware – within less than a trillionth of a second of its detection, the heavy W boson disseminates into a scattering of electric particle energy. It was already known to science, that a *heavy* W boson will decay in 10⁻²⁵ of a second: the properties of such a particle may only be considered in the light of their decay product(s).

The Higgs boson has been indicated to be a heavy W particle of around 125-126 Gigaelectronvolts (GeV). The weight of this W particle reflects the number of fundamental gravity photons of which it comprises. **Those particles are associated with the proton's estimated 2.2674** x 10^{23} fundamental gravity photons (fgphs) indicated within item 2. (on pages 20-21) – which have been observed by implication to become disseminated from the Higgs W boson within less than a trillionth of a second.

QUANTUM GRAVITY REVEALS - the *Law of Conservation (LoC) manifests control over the conjugation of energy and time. In other words: the LoC has absolute control over matter and radiation. One of the functions of the LoC is to conserve energy where matter is concerned at +1 and -1 Units of Charge i.e. plus or minus 1.602 177 x 10⁻¹⁹C. *Supplementary 'Reference' Information page 149, item 18.

The most elementary example of LoC control is demonstrated by the decay of a Neutron (neutral electric charge) to a Proton (+1) and Electron (-1) within 15 minutes of the Neutron leaving its close association with the Proton. However, when **W** and **Z** particles (each about a hundred times heavier than a proton) were discovered at CERN's European Laboratory for Particle Physics, it was observed they had a life of only 10^{-25} seconds. The implication here is that within 10^{-25} seconds, the LoC commences a return of the W and Z particle(s) to +1 and -1 Units of Charge (i.e. plus or minus 1.602 177 x 10^{-19} C).

There is a close connection here with that stated within 'item 3' which is soon to follow.

Relevant Observations.

The 'formula for gravity' was originated by RWS during the last quarter of 1994. Independent scientist Albert Mantiziba and RWS collaborated closely in the development of some three hundred pages of detailed notes, indicating the 'source and workings' of gravitational electric particle 'field energy'. In addition they developed a number of vital new aspects of science, taking the form of advances made in fundamental nuclear physics by this Partnership: matters which have been corroborated since by respected independent research organizations which are well-known to the scientific community. [Additional information within the latter context, will be conveyed as this White Paper progresses.]

IT WOULD BE TRUE TO STATE and further evidence in this White Paper will confirm:-

- (a) The 'gravity photon' is the 'fundamental source' of *all* electric particle 'field energy' within the universe.
- (b) Matter and radiation are comprised of fundamental gravity photons (fgphs).
- (c) The speed at which subatomic data is carried by photons and thereby displaced-in-time, is critical to the existence of matter and radiation. Should a 'galactic' speed of light *c* minutely exceed the upper limit for the 'universal time frame', all photons within the galaxy concerned will cease to exist details within items 4. and 5. follow in this 'Section Two'. *Conversely should the 'field energy' speed of atoms comprising human tissue become too slow, serious and often life threatening health problems occur information commences within item 6.

[*The latter science will be suitably enlarged upon in this White Paper – 'Section Three'. Specific medical issues arising will be explained in detail as an 'easy read': the writer taking due care to inform appropriately the reader, concerning 'alternative new treatments' required in support of variations in medical needs. Should we fail to do this – experience has confirmed, calls for variation in treatment can cause a clinician to revert to matters in terms

of biology and/or chemistry, rather than the nuclear medical physics which reflect the need.] Updated June 2019: please refer to Professor Andy Parker, pages 152-153

3. EACH FUNDAMENTAL GRAVITY PHOTON (fgph) IS DISPLACED-IN-TIME BY ITS WAVEFORM (wavelength).

A PREDICTION was made by RWS, associated with his research during the last quarter of 1995 and prior to June of 1996:

i) The fundamental gravity photon – which comprises *in immense numbers* the fundamental electrical component of atoms – are each associated with a wavelength *depicted as follows*:

,

The 'linear arrow', reflects the displacement-in-time of the electric particle 'field energy'.

ii) Within the above depiction of the 'displacement-in-time' (that applies to each single fundamental gravity photon) there exists data appertaining to the characteristic of each photon. This item 3. is referred to on page 72. [One detects here a connection with the Higgs boson, and that so far attributed to its purpose and function by scientists at CERN.]

AN ANALOGY.

'Science' acknowledges that atoms consist of electric charges.

- (a) The proton consists of plus and minus fractional electric charges, equalling +1 unit of charge. The neutron is a neutral charge, consisting of equal plus and minus fractional charges. The electron consists of plus and minus fractional electric charges, considered to equal -1 unit of charge.
- (b) The Periodic Table consists of four groups numbering *118 elements in total: each chemical element comprising a different number of protons, neutrons and electrons. [The exception hydrogen, which has no neutron.]
- (c) *Protons, neutrons and electrons are acknowledged to create 92 <u>natural</u> chemical elements: <u>two examples</u> of which, are referred to below.

An atom of silicon is comprised of 14 protons, 14 neutrons, and 14 electrons. An atom of iron comprises 26 protons, 30 neutrons, and 23 electrons. Electric particle charge is thereby *observed to be* associated with matter.

Matter is however observed to be a solid. Electricity which *apparently* comprises matter is not a solid.

(d) *SOMETHING ELSE IS THERFORE INVOLVED. We refer here to new science associated with a highly advanced understanding of fundamental physics beyond the Standard Model. In particular, the electric particle data that

is displaced in-time according to its 'field energy' speed: an advance in scientific knowledge, with true significance for medical research.

*That fundamental 'something', has been commented on by four independent and respected physicists, [A document under the heading 'The universe as a hologram." is available to read on the internet, within homepages.ihug.co.nz/-sai/hologram.html: therein will be found the viewpoints of physicists Alain Aspect, David Bohm, and others. [The following References are contained more fully on pages 40-41.]

"In 1982 a remarkable event took place. At the University of Paris a research team led by physicist Alain Aspect⁷ performed what may turn out to be one of the most important experiments of the 20th century." "Aspect and his team discovered that under certain circumstances subatomic particles such as electrons are able to instantaneously communicate with each other regardless of the distance separating them."

"University of London physicist **David Bohm**, for example, believes Aspect's findings imply that **objective reality does not exist**, that despite its apparent solidity the universe is at heart a phantasm, a gigantic and splendidly detailed hologram."

"..., at the very least, as noted by **Basil Hiley**⁹, a physicist at Birbeck College in London, **Aspect's findings 'indicate that we must be prepared to consider radically new views of reality'**." Physicist David Bohm indicates we "are actually extensions of the same fundamental something."

The reader is invited to consider the additional information within the 'Published Information' commencing page 40 and then on to references ^{7, 8, and 9} on pages 41-42 of this Section Two – also the perspective of Craig Hogan¹⁰ on pages 42-43: Director, the Fermilab Centre for Particle Astrophysics, United States of America.

CORROBORATION by way of pieces to a 'physics jigsaw', we shall endeavour to unravel for readers. **The question has been raised by physicists:** "A wavelength of light: is it a wave or a particle?" The existing wave particle duality principle associated with quantum gravity – holds that matter and light exhibit the action of both waves <u>and</u> particles, dependant on the circumstances of the experiment. The subject is said to have remained complex and intriguing for physicists.

We state – the pathway followed by a fundamental particle of energy, is creative of a waveform. In this way – the Law of Conservation (LoC) ensures that each fundamental gravity particle of electric energy, is 'displaced-in-time' by its waveform – a wavelength which has been considered by physicists to form a photon.

'Light is shed' on the relative science, by considering the report in "*Nature*" (vol 391, p 667) and reported on within "*New Scientist*" 14th February 1998.

A team led by Thomas Ebbesen of the Louis Pasteur University in Paris and the NEC Research Unit in Princeton, New Jersey, USA, made a discovery quite by chance – when they set out to make "quantum cavities" in a glass-backed metal film. In order

to check the quality of the cavities (i.e. holes bored through the metal to the glass) they illuminated them with a range of wavelengths.

Thomas Ebbesen stated — "To our astonishment, we saw light transmitted with 100 per cent efficiency at a wavelength 10 times bigger than the diameter of the hole". Ebbesen, realizing the 'theory' had suggested that the photon has an effective size equal roughly to its wavelength, commented — "So it should not be able to squeeze through a smaller hole".

Ebbesen's team observed also "200 per cent transmission": *i.e.* twice the light that impinged on the holes. Thomas Ebbesen conveyed — "This occurs because even the light which falls between the holes can excite plasmons, producing light on the far side of the film". [A surface plasmon is a travelling wave oscillation of electrons, which can be excited at the surface of certain metals that have the right material properties.]

THE REALITY is confirmed within an advanced understanding of quantum gravity. The 'profile' of every wavelength is 'formed by the 'pathway of a particle of energy' — the latter fundamental particle *is estimated* in scale to be at least (and almost certainly more than) ten times less than that of the wavelength.

Thereby the 'particle of energy' can be understood to have been enabled to pass through a hole at least (and almost certainly more than) 10 times bigger than the diameter of the particle. Because of this reality: the latter fundamental particle was enabled to continue to develop the 'profile' of its waveform (wavelength) on the other side of the glass-backed metal film.

The physicist is in a position now to understand – the above is that which the fundamental particle of energy <u>was then observed to do</u>, for Ebbesen went on to convey — the energy particle was seen to be "producing light on the far side of the film".

Light is of course formed by 'wavelengths' of electric particle energy with a frequency of 10¹⁵ hertz. [It is helpful to indicate here: a solar panel is able to collect the *1.2349 x 10²⁰ fundamental gravity photons (emitted in wavelengths of light from the sun) which comprise each electron – in this manner, the solar panel generates electricity. *The reader may wish to refer again to item 2, 'commencing' on page 20.] The aforementioned article in "New Scientist" based on a report in "Nature" concluded with the statement by Ebbesen, "However, we have shown we can get 1000-nanometre light through 150-nanometre holes". By analogy, one cannot place 6.6 pints into a pint pot. With respect: the former 'theory' that the photon has an effective size equal to its wavelength, can no longer be reasonably held to stand.

A WAVELENGTH MAY NOW BE UNDERSTOOD to result from a 'particle of energy' – a fundamental electric particle gravity photon (fgph) – displaced 'by its waveform' over a distance-in-time and in this manner producing a wavelength.

(i) Radiation is formed by a frequency of 'single fundamental photons'. The displacement-in-time associated with each particle photon is designated by its

wavelength and thereby the frequency hertz. The frequency is associated with the characteristic presented by the energy: a reality demonstrated by reference to the electromagnetic spectrum. [Minor variations between wavelengths of light, produce the spectrum of colours seen within a rainbow.]

Radiation operates normally with a 'field energy' equal to the speed of light c. Abnormal radiation operates with a 'field energy' that is <u>less</u> than normal (*i.e.* less than the speed of light c) and is referred to as radioactivity.

- (ii) Matter is of course formed by atoms comprising (with the exception of hydrogen which has no neutron) protons and neutrons (formed by quarks) and electrons (which also comprise of quarks / RWS initiated in 1994 the name quarkel).
 All of these components are formed by fundamental gravity photons (fgphs) as stated within Section Two, item 2, commencing on page 20 of this White Paper.
 - (a) The 'field energy' speed of the electric particle energy comprising the fundamental photons of normal matter, is the speed of light c.
 - (b) Should the 'field energy' speed of the electric particle energy of matter become influenced by radioactive radiation, sufficient to slow the 'field energy' speed of the fundamental photons to <u>less</u> than the speed of light, the matter concerned will then be 'radioactive'.

THE DISPLACEMENT-IN-TIME OF PHOTONS COMPRISING MATTER, DIFFERS FROM RADIATION IN ONE IMPORTANT RESPECT:

- (i) **Atoms** form matter and consist of data that exists within the 'displacement-in-time' of each of the fundamental particles forming protons, neutrons and electrons: these comprise matter as science presently understands it to be. [The reader may refer again *if necessary* to item 2, pages 20-21. For those in doubt: if the electric particle fundamental photons which comprise matter did not contain individual data all atoms and thereby all matter would be of identical composition *i.e.* multiples of an identical charge.]
- (ii) Radiation is formed by 'cosmic photons' of extraterrestrial origin, consisting of one or more charged particles; or other radiation formed by the 'profile' of electric particle wavelengths each consisting of the 'pathway' of a fundamental photon, comprising electromagnetic wave transmission at a specific frequency Hz.

The resulting waveform (wavelength) serves to *displace-in-time the data in the form of information, which is carried by the particle(s) concerned.

*If that stated here was not so: the electric particle energy which is known to be associated with matter and radiation, would not and could not exist within the universal time frame.

THERE REMAINS A 'CRITICAL FACTOR'. For normality to exist – the 'field energy' speed at which the displacement-in-time takes place – must be the speed of light c. The reality of the last statement will be made clear, by evidence in support, to be provided within this 'Section Two' items 4 and 5. We refer to an advanced level of understanding, culminating in knowledge that is vital to the medical profession – knowledge which is to be summarized within item 6, and enlarged on suitably within 'Section Three': including appropriate corroborating medical evidence, provided by independent university research teams.

IMPLICATIONS. The advanced knowledge summarized within this item 3, will be shown to have an appropriate bearing on the 'potential' attributed to the Higg's boson by scientists at CERN. This Partnership will in due course produce *in the latter context* a learned White Paper. In the meantime, the needs of medicine and its patients must remain our 'first' priority.

Having made the latter statement, it is realized the advance in fundamental physics which is to follow shortly within items 4 and 5 may (at this juncture) seem to members of the medical profession, to have little or any bearing on the understanding of 'outstanding problems in medical science'. With respect it needs to be said, there are major problems facing medicine today. In all kindness and while many hold appropriate positions to examine the needs arising, as yet they lack suitable knowledge concerning that which is required in terms of the medical science that has remained outstanding. The mindsets of researchers and the establishment, are required to become more open-minded. Failure to do so is bound to allow an ever growing number of people to suffer and die needlessly: indeed, the potential 'eventual scale' of that which otherwise is seen to lay in our pathway, would become unbearable to mankind.

THE READER IS ADVISED: items 4 and 5 are to convey knowledge beyond the Standard Model (which has been prepared within this White Paper as an 'easy read' for a wide professional readership).

The knowledge that we are to convey, has been independently corroborated by research organizations of note. In this respect we are to convey advances in nuclear science which pointed the author in June/July 1996 to certain mechanisms, that were to explain the underlying cause and eventually the treatment of, a number of serious health problems which the profession acknowledge are difficult or seemingly impossible to treat. Knowledge which – when applied by university research teams – have (by way of example) *yielded efficacious success rates of commonly up to 95% when treating Cancer, with little or no side effects and in some cases a useful reduction in medical costs. [*Appropriate medical details are provided within 'Section Three' of this White Paper.]

It has been estimated responsibly – two new Cancer treatments would collectively prove appropriate in support of an 'estimated four fifths' of *all* cancer types. A third and new form equipment we are in a position to specify, can bring several remaining cancer types within the range of those who may then be treated with success.

In addition – parallel treatments can be developed for <u>all</u> electrically abnormal pathogens. More concerning this will be presented within 'Section Three'.

4. A PREDICTION was made by June 1996, that THE SPEED OF LIGHT IS VARIABLE.

There is an 'upper limit' to the speed of light, which scientist Albert Mantiziba *in collaboration with Robert Wood-Smith (RWS)* estimated to be 471,102,434 metres per second. [See also update June 2019 within item 25. (iii), page 153.]

Sir Brian Pippard when Cavendish Professor of Physics, University of Cambridge, expressed the viewpoint: "Can we discover any way of combining public and private knowledge into a complete description? Only by joining to our outward-looking skills, those employed by expert cultivators of the inner landscape, and preferably by combining both kinds of expertise in the same individuals."

Given the above position: RWS became interested in Sir Brian Pippard's viewpoint – that if or when physicists reach an understanding the speed of light is <u>not</u> a universal constant, many of the outstanding problems in physics could be resolved.

RWS had been regarded as a heretic in association with his prediction in 1994 – the electron is formed by component fractional charges (confirmed subsequently as stated in this Section Two, item 1). RWS was also so regarded, when he and Albert Mantiziba BSc.(Hons.) Chem.Eng. predicted (in June of 1996), there would be found immense holes in space wherein there is no matter at all – an unusual phenomenon, which has since been observed consequential to the 'upper limit' for the universal speed of light having been challenged in reality. The latter proved to be a matter of highly advanced physics which was independently corroborated subsequently, as a result of evidence published by an international team of astrophysicists. The science and supporting evidence, is to be conveyed within item 5 of this 'Section Two'.

A significant understanding of 'quantum gravity' provided in June 1996 – a truly unusual advance in mankind's knowledge of gravity, light, and time. A derivative of which placed much needed light upon a number of serious medical problems, which are understandable and efficaciously treatable in the light of an advance that has been made in the relatively recent past, in the field of 'nuclear medical physics'.

The CORROBORATION required in this instance, came forth subsequently from an international research team during September 1996. The evidence to which we refer, is associated directly with a closely parallel prediction, which is detailed for the reader *as stated* within the following item 5.

The IMPLICATIONS are likely to give rise to a 'stir in scientific circles'. Clear corroborating evidence manifested that was independently reported and published: the associated details are set out within item 5. Reference is made here to highly advanced nuclear physics – which would enable RWS to perceive and understand

<u>certain underlying fundamental physics that applies to matter / its very existence / and thereby to a highly advanced level in nuclear medical science – which has since been seen to resolve a number of grey areas in present-day medicine.</u>

A summary of the latter medical science will be presented within 'Section Two', item 6. 'Section Three' of this White Paper will provide supporting medical evidence, produced by entirely independent university medical research teams.

5. WE ARE TO PROVIDE NEXT A SUITABLE INTRODUCTION to research findings presented by an international team, which served to corroborate a prediction made by this Partnership.

RWS was thus enabled to perceive therein, a 'DERIVATIVE' in support of a truly MAJOR ADVANCE IN THE UNDERSTANDING OF FUNDAMENTAL NUCLEAR MEDICINE.

We provide hereunder an outline of matters relevant at the time.

In a letter to Professor Peter Day FRS, Director & Resident Professor of Chemistry, Royal Institution of Great Britain, collaborating scientist Albert Mantiziba B.Sc.(Hons.) Chem.Eng. summarized during the first week in August 1996 / on page 4 of 8 / 2nd paragraph, the following prediction which RWS had discussed earlier with him. "Extreme gravitational emissions such as in Black Holes, represents a second limiting condition where matter eventually unravels, time comes to a standstill and energy returns to source. Without matter and associated radiation; energy, time and gravity would not exist."

Note. Within a report headed *THE SECRET at the CORE: the latter concise words concerning an unusual subject matter, are contained within our formal copy of the above mentioned letter to Professor Peter Day FRS. Albert Mantiziba's letter to The Royal Institution in the United Kingdom, presented a word picture in précis. [*A copy of the last named document may be made available to suitable parties, upon request to this Partnership.] Additional information now follows.

THE ABOVE 'PREDICTION' conveyed to Professor Day – was supported by the following understanding of gravity, light, and time, which was understood by RWS and Mantiziba prior to June 1996.

A Factor of Gravity.

Within the early universe there existed thousands of **very** large stars. The immense gravitational electric particle strength of these, caused the 'mechanism of supernova' to develop within a shorter period of time than applied to *other* smaller but still great stars which were to supernova later. The residue of the 'very large stars' formed the most immense black holes: the remainder of the 'great stars' formed smaller black holes.

- (i) There is a 'black hole' of considerable size at the center of each galaxy.
- (ii) A 'black hole' is formed by net negative gravitational energy.

- (iii) The electric particle energy of all of the stars within a galaxy, is comprised of both negative and positive fundamental gravity photons. Stars and planets are gravitationally net positive. Detailed knowledge is to be provided within a proposed new book, under the heading 'The Ultimate Theory of Everything'.
- (iv) The immensely strong gravitational black hole at the centre of each galaxy, attracts and engulfs the closest stars. The positive gravitational content of a star when digested by this primary black hole, is seen to be ejected. By this mechanism, the negative gravitational strength of the black hole increases slowly over time.
- (v) As the immense gravitational strength of the black hole at the center of the galaxy increases, so must also the power of its negative gravitational attraction: thus causing further stars (including any star clusters and their smaller black holes) to become engulfed by the black hole around which the immense number of stars forming the galaxy are gathered. This is an ongoing process, at the center of galaxies within the universe.

A Factor of Light.

[This matter is referred to again on pages 45 and 124.]
An advanced understanding of quantum gravity predicts –
THE LAW OF CONSERVATION (LoC) CONTROLS,
THE CONJUGATION OF ENERGY AND TIME.
The LoC's control over matter and radiation is absolute.

A function of the LoC – with the exception of the fundamental gravity photon – is to conserve energy as +1 and -1 Units of Charge (1.602 177 x 10⁻¹⁹C). This example of LoC control is demonstrated by the known decay of a Neutron (neutral electric charge) to a Proton (+1) and Electron (-1) within 15 minutes of the Neutron separating from its normal close association with one or more Protons. When W and Z particles (each about a hundred times heavier than a proton) were discovered at CERN (the European Laboratory for Particle Physics), it was observed by scientists they had a life of only 10⁻²⁵ seconds. Within 10⁻²⁵ seconds, the LoC had commenced to return the W and Z particle(s) to +1 and -1 units of charge: each equal to the value of plus or minus 1.602 177 x 10⁻¹⁹C.

ANOTHER MAJOR FACTOR OF THE LoC AND ITS CONTROL – is concerned with DETERMINATION OF THE SPEED OF LIGHT *c* for each galaxy.

Early in 1996, RWS had discussed with collaborating scientist Albert Mantiziba –

- The existence of a Universal time-frame (471 102.434 m/s): RWS indicated to Albert, where in science the calculable evidence was available. From that information, Mantiziba calculated the latter velocity (in due course, more information will be provided within the proposed new book, 'The Ultimate Theory of Everything').
- b) A function of the LoC is to determine the precise speed of light c for each galaxy: the criterion for this speed, is associated with the intensity of the

gravitational strength of the negative energy comprising the primary black hole at the centre of the galaxy.

c) With due care to known detail understood by RWS in June 1996 and predicted in July 1996, the following states the case appertaining to an unusual reality.

IF OR WHEN the level of gravitational strength of the primary black hole (which is central to a galaxy) was to become such, that the Law of Conservation determines the velocity of the electromagnetic spectrum to be beyond (by even the most minuscule of margins) the speed reflecting the 'upper limit' of the Universal Time-frame (estimated to be 471 102.434 m/s) – time can no longer expand and thereby exists no more, for that now former galaxy. [Referred to again later on page 42.]

Matter comprises energy displaced over distance-in-time. ENERGY AND TIME ARE CONJUGATE: if or when electric particle energy ceases to be displaced-in-time, matter is 'no more'. Scientific evidence for this reality, now follows.

CORROBORATION.

Scientific evidence – *indirectly* in support of the predictions indicated above in a) and b) – combined with the culmination of these which is expressed in c) – was provided subsequently by an international team of astronomers. Their evidence (below) was published in the journal 'Astronomy Now' / issued September 1996.

"Space is full of empty 'holes' according to a recent survey of the motions of more than 2000 galaxies. An international team of astronomers has used optical and radio telescopes around the world to measure the speeds with which these nearby galaxies move through space. Using a computer program developed at the European Southern Observatory, the scientists worked out how matter is distributed between the galaxies."

"Their surprising conclusion is that regions which appear to be empty in optical telescopes are, indeed, without any matter at all -". "Some of these voids are up to 100 million light years across and among the largest structures ever seen in the Universe."

"How these holes formed is, as yet, unexplained. They do not seem to occur in the cosmic radio background produced after the Big Bang, so they must have formed at a later date. A major change in current theories of galaxy formation may be required to account for the new observations." Peter Bond. [With acknowledgement and thanks to the journal 'Astronomy Now', for their publication of this 'valuable evidence in support of the knowledge of science'.] Pages 30-31 are referenced again on page 81.

[Relevant Note. Quantum Gravity indicates that dark matter comprises material which has insufficient gravity to initiate a nuclear reaction at its centre. The widespread reference to dark matter by scientists – reflects an immense volume of 'minor debris' resulting from the big bang, which exists within and beyond the gravitational pull of the black hole at the centre of a galaxy. Further knowledge will be provided within the proposed new book, 'The Ultimate Theory of Everything'.]

The IMPLICATIONS subsequent to the predictions a), b), c), together with the 'Corroboration' conveyed above – enabled Robert Wood-Smith (RWS) to outline a further significant advance. We refer here to a significant advance in NUCLEAR PHYSICS, which has resulted in a comprehensive medical understanding of a vital derivative: knowledge that has provided an underlying understanding in support of new medical treatments – together with independent and medically proven potential which can serve to save millions of lives worldwide each year.

THE IMPLICATIONS FOLLOW:-

During the early months of 1996 the writer (RWS) and Albert Mantiziba, determined certain associated groundbreaking fundamental physics which, in due course, provided evidence in support of a significant advance in 'nuclear medical science'.

The knowledge which follows

has been found to have profound consequences for medicine.

i) The speed of light is not the universal constant assumed in the Standard Model: there are variations in the speed, coupled with an upper limit which has been estimated to approximate to 471,102,434 metres per second.

For 'continuity and context': may we remind the reader hereunder in ii) and iii), of knowledge indicated previously within this White Paper.

ii) The fundamental gravity photon – which comprises *in immense numbers* the fundamental electrical component of atoms – are each associated with a wavelength:



the linear arrow reflects the displacement-in-time of the electric particle energy.

- iii) Within the above depiction of the displacement-in-time, which applies to each single fundamental *gravity* photon, data exists in the form of information *displaced-in-time* associated with the characteristic activity of that photon.
- iv) RWS understood in June 1996 and went on to predict in July of the same year, the potential for a significant advance in nuclear medical physics. The subject matter was soon to become the reality and became understood subsequently in fine detail by RWS before matters moved on, and was shown to be suitably proven *independently* by university medical research teams.

v) PREDICTION.

(A) WE CAN UNDERSTAND that when the universal upper limit for the speed of light is overextended, matter is no longer displaced within the time frame of the universe and *thereby* no longer exists within our dimension. WE CAN UNDERSTAND ALSO, the speed of light *c* is critical to normality.

(B) CONVERSELY – recognizing that 'field energy' is a region in which a force is effective (i.e. gravitational field, electromagnetic field) – radioactive electric particles have a 'field energy' which is LESS than the speed of light c. Alpha particles travel at in the region of 6% of light c. Beta particles operate mainly at 99% of c (sometimes less than this). It had been considered that gamma rays operated at the speed of light c: however astrophysicists have discovered since, that gamma rays from a very distant source arrive on Earth subsequent to light rays from the same source. i.e. Gamma rays travel at a speed which (although slower by an ultra-minuscule margin) is almost interceptive with that of the speed of light c - (Refer item 23. pages 150-51). [Reference to pages 29-35 is made on page 140.]

RADIOACTIVITY is a term used (in reality) when referring to energy formed by electric particle 'field energy' which is moving at <u>less</u> than the speed of light *c*. [Low-level radioactive electric particle 'field energy' exists widely within the natural environment. Toxic chemicals cause an erosion of the DNA's *otherwise* natural protection against the influence of 'low-level' radioactive radiation on human tissue. Additional knowledge *to that which follows*, is to be provided within 'Section Three' of this White Paper.]

Bearing in mind the above realities, one needs to take into consideration –

- (i) An elementary truth is that the electric particle 'field energy' speed of the atoms of *normal* living tissue, operates within a standing wave at the speed of light c.
- (ii) In the event of the speed of light c becoming reduced in 'field energy' speed, to a velocity less than that of light c (consequential to even modest exposure to low-level radioactivity within the natural environment) the electric particle data of 'normal living tissue', operating as it does (within the fundamental photons of the atoms) at the speed of light c when exposed to radioactive electric particle 'field energy', *would become affected in some way.
- (iii) *The two different 'field energy' speeds will merge to form an average speed: that *is to convey* the average between the normal 'field energy' speed of light *c*, and the slower moving electric particle 'field energy' speed of that which *commonly* within the natural environment is low-level radioactive particle energy.
- (C) When considering next the effect of the resulting slower than normal electric particle 'field energy' speed, which will have taken place in (usually as above) a select few DNA atoms: the following analogy provides a useful pointer to the change which takes place in the condition of the data, which is carried by the fundamental photons of one or more specific aspects of the DNA's base pair atoms.

ANALOGY. When the human voice is recorded at a normal speed, then replayed subsequently at a slower speed: while the content of the data remains unaltered, the slower speed is known to distort the sound produced from the voice data. From this analogy the reader may understand: any distortion of the displacement-in-time of the data carrying fundamental photons of living tissue, would cause an electrically abnormal pathogen(s) to form.

(D) DNA is known to comprise in the region of three billion 'base pairs': these are *of course* formed by atoms, and in turn (*it is now understood*) by an immense number of fundamental photons – each of which contains data which (*when not under the influence of radioactive energy*) has its 'field energy' displacement-in-time operational at the speed of light *c*.

The human body contains some five trillion cells, providing a multiplicity of functions. The nucleus is a membrane enclosed organelle found in most eukaryotic cells. Most of the genetic material of cells is organized in the form of long DNA (*deoxyribonucleic acid*) molecules comprising a genetic code containing the data needed to make an organism; or to renew cells to maintain their function.

Normal cells are comprised of data which is displaced-in-time at the speed of light *c*. Only with the facility of the precisely correct 'field energy' speed – are cells enabled to respond to chemical structures (drugs) and/or antibiotics (made from mould and bacteria by biosynthesis): either of which are likely to be comprised of data that is displaced-in-time at the speed of light *c*. **That is to convey:** the data of the cell and that of a drug or antibiotic, have normally a common 'field energy' speed and are thereby inter-transmissible in terms of their ultra-minuscule electromagnetic data.

There are *however* circumstances where drugs and/or antibiotics are found to be resistant to certain diseases. This is a consequence of the pathogen being electrically abnormal: that is to convey, the atoms which form the cell, protein, bacterium or virus comprising the atoms of the pathogen, are operating electrically with a 'field energy' speed which is \underline{less} than that of the speed of light c.

As a consequence of this difference in 'field energy' speed, there is an electrically inefficient communication between the atoms comprising the drug or antibiotic on the one hand – and the atoms comprising the electrically abnormal cell, protein, bacterium or virus which comprise the pathogen on the other. For this reason, the intended remedial data of the drug and/or antibiotic are rendered incorrectly transmissible to the pathogen concerned.

How this critical difference in 'field energy' speed occurs and how it can be treated successfully, will be introduced within item 6 of this 'Section Two', and explained further in suitable detail within 'Section Three' of this White Paper commencing on page 47.

Director General Rolf Heuer and scientists at CERN, may desire to consider the forgoing items 1, 2, 3, 4, and 5 within this 'Section Two'.

6. PHYSICS AND MEDICINE have remained until recently, A SCIENCE JIGSAW.

This item 6 leads on from the series of predictions, corroborations, and implications set out within items 1, 2, 3, 4 and 5 – by way of:

- i) Consequential Predictions that (a) have proved relative to the data referred to above, and which have been found to reflect the remedial mechanism applicable to new treatments for Cancer; as well as (b) certain other serious health problems that have as their agent an electrically abnormal pathogen.
- ii) CORROBORATION(S) that were introduced subsequently, by university medical research teams.
- iii) IMPLICATIONS of significance for medicine and patients, in countries across the world.

ON BEHALF OF THE READER, IT WOULD BE APPROPRIATE FOR TWO QUESTIONS TO BE RAISED.

- (a) For what underlying scientific reason, does there exist the presence of a carcinogen within living tissue of the forerunner to a Cancer?
- (b) Given the advance in nuclear physics contained so far within this 'Section Two' by what mechanism are up to 95 per cent of Cancers caused?

CONSEQUENTIAL PREDICTIONS that respond to the above questions, were indicated by RWS during 1996-2008. The predictions, to which we refer, are summarized within the context of the information that immediately follows.

The DNA has the capability to decode in an entirely efficacious way *only* a limited number of chemical structures: these being those chemicals which are natural to the associated living tissue.

(i) When a carcinogen (a 'highly toxic' chemical) is first detected by the DNA, this results in a disturbed registration (recognition) for reason of the unnatural indeed foreign electric particle data associated with a highly toxic chemical which is unnatural to the DNA. Over a period of time, dependent on the level of toxicity, the indistinct registration of the data will produce a cumulative effect, resulting in the eventual partial breakdown of the natural defence of the DNA against the influence of low-level background radiation within the natural environment.

- (ii) A number of **less** toxic chemicals may also be detected by the DNA: the collective effect of which can over a period of time, become parallel to the effect of one carcinogen'.
- (iii) Thus the effect of a carcinogen or the prolonged 'collective effect' of a number of less toxic chemicals will be to introduce *eventually* an 'indistinct registration' upon the DNA's data. This anomaly in certain electrical data of the DNA, has an eroding effect on the DNA's *otherwise* natural and vital capability to resist the distortion, that can be caused by *usually* low-level radioactivity within the environment.
- (iv) The abnormal slower moving electric particle 'field energy' which is the 'characteristic' of radioactivity whether it be at low-level or of greater intensity when no longer resisted by an electrically normal DNA, will result in an averaging of its radioactivity-induced abnormal slower speed, with the normal electric particle 'field energy' speed of those atoms which comprise the formerly healthy cell, protein, bacterium or virus.

[In the event of an encroachment upon the DNA being made by that which is *commonly* low-level radioactive electric particle 'field energy' within the natural environment; the reality that DNA consists of electrical data, makes the latter information vulnerable to the foregoing distortion.]

IT IS ALSO AN UNDENIABLE REALITY: low-level radioactivity is widespread within the natural environment. The DNA will become exposed to *even* low-levels of radioactivity, when a sufficiently injurious influence of toxic chemicals has taken place: a state that is compounded by a collective effect and/or or that of a carcinogen.

The mechanism conveyed within items (i) (ii) and (iii) on page 33 will thus make susceptible – a proportion of up to approximately one-third (in the near future two fifths) of a given population during their lifetime to one or more Cancers, which are radioactivity-induced and thereby radiosensitive.

UP TO 95 PER CENT OF PRIMARY CANCERS ARE RADIOSENSITIVE, that is to convey – the cancer cells will be of a type that would respond to an appropriate utilization of electric particle 'field energy' at the speed of light c. The latter form of treatment is a need – in order to elevate the slower moving electric particle 'field energy' of the affected atoms within a patient's tissue, to the electric particle 'field energy' speed of light c which is natural to all healthy tissues.

IN ADDITION it is necessary to convey to the reader: members of the population will also be at risk from *any* of a number of other diseases, which have as their agent an electrically abnormal pathogen. We refer to serious health problems which the medical profession acknowledge presently, to be either difficult or seemingly impossible to treat. [This latter position has remained ongoing, due *only* to a lack of knowledge which until now has been resisted by vested interests, and certain influential levels of intransigence within the medical profession.]

The referred to diseases and associated subject matters, together with knowledge of

potentially efficient remedial treatments -a number of which have been medically trialled, with highly efficacious results - are suitably detailed within the final 'Section Three' of this White Paper.

ITEM 5 OF THIS 'SECTION TWO', provided both scientific knowledge and evidence, indicating the vital importance of electric particle 'field energy' being maintained at the speed of light. Any distortion of DNA data which is consequential to a lowering of the normal 'field energy' speed of light to anything less than c – will result in the data concerned being displaced-in-time at less than the normal time frame of planet Earth (i.e. less than the 'field energy' speed of light for matter in our solar system).

The electric particle 'field energy' of an electrically abnormal pathogen, is outof-sync with the normal time frame. For this reason, chemical structures (drugs) and antibiotics — which are electrically energized by atoms operating within our normal time frame — cannot and do not, interrelate effectively with diseased tissue associated directly with an electrically abnormal pathogen.

CORROBORATION **is contained with Section Three**: wherein suitably detailed knowledge is provided in support of a number of highly efficacious new medical treatments – trialled originally by independent university research teams who applied appropriately, remedial electric particle 'field energy' to restore *effectively* the abnormal atomic DNA 'field energy' speed to normal. These advances in treatment have yielded success rates *commonly* up to 95 per cent – coupled in the case of at least one new treatment, with an acceptable lowering of costs. These treatments may now be acknowledged by the establishment, to be endorsed scientifically by the advance in nuclear medical physics presented within this White Paper.

WE CHOOSE TO CONVEY THE ABOVE WORDS "may now be acknowledged by the establishment": for despite the National Institute for Health and Care Excellence (NICE) approving the use of one of the advances made in treatment – i.e. Photodynamic Therapy (PDT) for cancers such as skin, mouth, oesophagus, head and neck: we are aware that PDT is also successful in the treatment of lung cancer—within the published article referred to in 'Section Three' on page 69 by Jerome Burne (one of Britain's leading medical health journalists and contributor to 'Medicine Today') it was stated that "less than 1 per cent of those who could benefit" actually receive it: adding "Just 300 cancer patients out of more than 300,000, were treated" during the previous year. [Pages 30-37 are referenced again on page 81.]

Lack of knowledge allows fear and distrust to operate: in this case to the considerable disadvantage of the medical profession and many of its patients. Publication of this White Paper may assist to alleviate problem to which we refer, which is allowing *quite literally* millions of patients worldwide to die needlessly each year.

CONCERNING THE MEDICAL IMPLICATIONS –

i) Nuclear physicists are placed in a position to consider the significant implications of a number of advances, associated with former 'grey areas' in science.

- ii) **Derivatives of the above provide for the profession,** solutions to a number of major problems in 'medical science' which, until now, have remained difficult if not irreconcilable.
- iii) Several million patients each year whose lives would continue to be lost needlessly, in the absence of knowledge within this White Paper could in the relatively near future be provided by the medical profession, with the necessary means to a right to life.
- iv) 'Section Three' will include, how drug and antibiotic resistance may very soon be overcome. The knowledge that is required, undoubtedly exists: what is needed, is the desire among the profession to develop the appropriate mindsets.
- v) The very real risk of a Pandemic, which could involve 'potentially' the deaths of up to one-third of the global population is growing steadily and may be caused by H5N1 'bird flu', the spread of the NDM-1 abnormal gene, and/or the further mutation of an animal virus. The potential for such a catastrophe which can be shown quite clearly, is resolvable by the introduction of appropriate medical equipment.
- vi) See also the 'INTRODUCTION' to Section Three page 48.

In addition to the above: during 2008 we presented a report to Sir Liam Donaldson, Chief Medical Officer, Department of Health, London, England, headed 'Medical Science is in Crisis, Worldwide'. The subject, "SERIOUS MEDICAL IMPLICATIONS & APPLICATIONS concerning ELECTRICAL ENERGY and its 'FIELD ENERGY' SPEED." [This reference is referred to again on page 65.]

We quote below from the above named 2008 report, page 15, item 3d:

"'Antibiotic resistant' infectious diseases
present a significant threat to medical services worldwide.

A VITAL AND NECESSARY UNDERSTANDING OF THE SCIENTIFIC UNDERLYING CAUSE OF ANTIBIOTIC 'RESISTANCE', reflects issues of the greatest importance to the medical research community ~ members of which will need a change in 'mindset', before those concerned may commence to comprehend the physics. There will be a need for the gift of a logical mind, a genuine desire to serve the needs of the profession and its patients; coupled with a realization that 'new scientific knowledge' is a most vital need of this time.

Professor Paul Davies, within the Preface to his book 'About Time, Einstein's Unfinished Revolution', commented with respect to the scientific community and people generally 'we are far from having a good grasp of the concept of time'." Members of the medical profession will need to comprehend time and the relative medical science ~ appertaining to the abnormal electrical displacement of energy-in-time factor associated with the underlying cause of abnormal agents of disease.

A senior spokesperson for the Medical Research Council in the United Kingdom has conveyed to this Partnership their standpoint – there is no science that is not already known to eminent scientists, on whom they can call to review any science presented. A number of review journals have become persuaded by a similar misconception.

Peer review is generally required to draw upon an 'equal' or 'authority' for the purposes of reviewing new science. Logical consideration of the advanced nuclear physics presented within those items referenced 1 to 6 within this 'Section Two', should be sufficient to enable it to be understood: there would not exist at this time those who hold prior knowledge at those levels which are either equal or authoritative, associated with the fields of advanced nuclear physics presented within this White Paper. With sincerely held respect, another way forward needs to be considered.

Publication of this White Paper may initiate a Select Committee of Scientists being invited to review the evidence, and discuss the various matters arising in face-to-face 'question and answer' meetings with Consultant Robert Wood-Smith and Professor Malcolm Hooper,

DIRECTOR GENERAL ROLF HEUER when speaking on behalf of the **European Organization for Nuclear Research (CERN)** on Wednesday 18th July, 2012 stated –

"We have reached a milestone in our understanding of nature".

"The discovery of a particle consistent with the Higgs boson opens the way to more detailed studies, requiring larger statistics, which will pin down the new particle properties, and is likely to shed light on other mysteries of our Universe."

The reader is invited to refer to page 18 'Section Two', wherein reference is made to an earlier White Paper by this Partnership – presented *from 11th October 2011 forward* to selected physicists in the North American continent and Japan. Thereby an opportunity was provided for some to have understood the clear indications by implication:

- (a) When the future "detailed studies" *referred to above by CERN's Director General Rolf Heuer* seek to understand "the new particle properties" of the Higgs boson which he went on to convey were "likely to shed light on other mysteries of our Universe" their needs will be found to parallel the advances in fundamental nuclear physics referred to within our White Paper compiled and presented *as above* during 2011 and *for a few* during the first quarter of 2012. [In order to alleviate doubts: a copy of the latter White Paper has been provided for the Editor of the Journal of Biological Physics and Chemistry.]
- (b) **Directly parallel matters of science** have been presented *in suitable detail* within this 'White Paper: collectively within 'Section Two', items 1 to 6.

IT IS APPROPRIATE WE SHOULD ADD – therefore there should be no doubt, that the knowledge presented within this White Paper has been known and

- understood by this Partnership for an appropriate period of time prior to the announcement of the Higgs boson by CERN in July 2012.
- (c) At this time however the first priority of this Partnership is to present with due care, knowledge of new medical treatments: we refer to suitably tested methods which are known to provide efficacious rates of success and have been 'independently medically proven' to apply in support of up to 95 per cent of the patients treated. We refer to patients suffering with Cancer: a disease which (the World Health Organization has indicated) killed 8.2 million patients worldwide in 2012 this was up from 7.6million in 2008. An estimated four fifths of the current cancer cases could benefit from one of the two treatments which are detailed within 'Section Three' of this White Paper.
- (d) There are in addition a number of other serious health problems, which have as their agent an electrically abnormal pathogen. New medical equipment remains a requirement, before the patients referred to here can be similarly treated. Necessary additional information is provided within 'Section Three'.
- (e) The 'resistant gene' NDM-1 has a mechanism which is to be explained within 'Section Three'. The most carefully supported theory, is yet to be tested. With quietly held confidence, we expect the outcome to become readily proven to be a health condition which can be shown to be treatable. [Reference to pages 27-40 is to be made on page 124.]

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Published Information.

In order for a majority of readers to consider the nuclear physics at a suitably advanced level: we are to encourage those who agree, to consider the information which is to follow.

In the realization that atoms are formed by a series of plus and minus electric particle charges which of themselves, *clearly* do not form matter: a number of scientists have written concerning one particular aspect of the associated 'science jigsaw', in terms of MATTER BEING LIKENED TO A HOLOGRAM.

[A document under the heading 'The universe as a hologram.' is available to read on the internet on homepages.ihug.co.nz/~sai/hologram.html – The Universe as a Hologram by Michael Talbot. Does Objective Reality Exist, or is the Universe a Phantasm? In 1982 a remarkable event took place. Within the latter document will be found the viewpoints of physicists Alain Aspect, David Bohm, and others.]

Supplementary 'Reference' Information numbered 7 to 13 continues below – from '<u>Supplementary 'Reference'</u> Information' 1 to 6, which were presented on pages 19-35 of this 'Section Two'.] We continue hereunder from relative passages that were included upon pages 23-25 within item (d):-

- 7. "In 1982 a remarkable event took place. At the University of Paris a research team led by physicist Alain Aspect performed what may turn out to be one of the most important experiments of the 20th century. You did not hear about it on the evening news. In fact, unless you are in the habit of reading scientific journals you probably have never even heard Aspect's name, though there are some who believe his discovery may change the face of science. Aspect and his team discovered that under certain circumstances subatomic particles such as electrons are able to instantaneously communicate with each other regardless of the distance separating them."
- 8. "University of London physicist **David Bohm**, for example, believes Aspect's findings imply that **objective reality does not exist**, that despite its apparent solidity the universe is at heart a phantasm, a gigantic and splendidly detailed hologram."

"The three-dimensionality of such images is not the only remarkable characteristic of holograms. If a hologram of a rose is cut in half and then illuminated by a laser, each half will still be found to contain the entire image of the rose. Indeed, even if the halves are divided again, each snippet of film will always be found to contain a smaller but intact version of the original image. Unlike normal photographs, every part of a hologram contains all the information possessed by the whole.

The 'whole in every part' nature of a hologram provides us with an entirely new way of understanding organization and order. For most of its history, Western science has laboured under the bias that the best way to understand a physical phenomenon, whether a frog or an atom, is to dissect it and study its respective parts. A hologram teaches us that some things in the universe may not lend themselves to this approach. If we try to take apart something constructed holographically, we will not get the pieces of which it is made, we will only get smaller wholes.

This insight suggested to Bohm another way of understanding Aspect's discovery. Bohm believes the reason subatomic particles are able to remain in contact with one another regardless of the distance separating them is not because they are sending some sort of mysterious signal back and forth, but because their separateness is an illusion. He argues that at some deeper level of reality such particles are not individual entities, but are actually extensions of the same fundamental something."

"In addition to its phantom-like nature, such a universe would possess other rather startling features. If the apparent separateness of *subatomic particles is illusory, it means that at a deeper level of reality all things in the universe are infinitely interconnected." *Supplementary 'Reference' Information item 21. page 149.

9. "..., at the very least, as noted by **Basil Hiley**, a physicist at Birbeck College in London, **Aspect's findings 'indicate that we must be prepared to consider radically new views of reality'."** Physicist David Bohm indicates we "are actually extensions of the same fundamental something."

This advisory WHITE PAPER has presented within this 'Section Two', additional pieces to the outstanding 'science jigsaw': also thereby *beyond doubt or reservation* to the "fundamental something" which the eminent physicist David Bohm has indicated.

- (i) THE "FUNDAMENTAL SOMETHING" reflects matter, associated with electric particle energy, displaced-in-time. The matter 'hologram' (so called) is the manifestation of electric particle data displacement-in-time. In the event of the 'field energy' speed associated with some atoms comprising matter becoming less than the correct individual galactic speed of light c from a medical perspective, the matter 'hologram' per se would be subject to a degree of distortion.
- (ii) From the purely scientific perspective 'time' is normally displaced at a given 'field energy' speed of light c. The speed is variable within an 'upper universal limit' and is determined by the Law of Conservation (LoC) in association *specifically* with each galaxy. The *latter* speed is determined by the LoC., relative to the strength of the gravitational energy comprising the 'black hole' at the centre of the galaxy.

In regions beyond the reach of galactic gravitational energy and therein with no constraints: the speed of light travels at the universal optimum which is *estimated to be* 471,102,434 metres per second ~ pages 30-31 a), b), c).

Summary. In the event of the strength of a black hole becoming so intense, that the LoC determines the speed of light *by the smallest of margins* to be beyond the above 'upper limit' for the universal time frame: the evidence within Section Two pages 29-30 commencing 'A Factor of Gravity' serves to confirm, the galaxy concerned will no longer be displaced within-the-time-frame of the universe.

The independent 'corroborative evidence' on page 31 indicates in conjunction with the knowledge on page 30: matter exists-in-time *only* when the subatomic speed of the atoms comprising matter, does <u>not</u> exceed the universal 'upper limit' for the speed of light c. That is to convey, in circumstances where the latter speed of light c is exceeded; the matter 'hologram' would no longer exist-in-time – **the evidence for which is perceived by the immense holes in space** 'without any matter at all' – which has been found by an international team of astronomers who reported, "regions which appear to be empty in optical telescopes are, indeed, without any matter at all –". "Some of these voids are up to 100 million light years across and among the largest structures ever seen in the Universe." **Holes in space which are not within the COBE sky map of the early universe.**

10. Craig Hogan is Director of the Fermilab Centre for Particle Astrophysics, USA. Internet reference >>> astro.fnal.gov/people/Hogan/ - Cached - Similar

Discovery by GEO600: New Evidence of a Holographic Universe? Certain viewpoints attributed to Craig Hogan and other well-known physicists, are included within the Internet reference >>> www.khouse.org/articles/2009/839/

Holographic Universe: Discovery Could Herald New Era In Fundamental Physics— www.sciencedaily.com/releases/2009/02/090203130708.htm - Cached - Similar . Cardiff University researchers ~ taking part in a British-German team ~ searching space to study gravitational waves, are considered *in the view of an American physicist* to have found evidence which points to one of the most important discovery in physics.

Craig Hogan (physicist at Fermilab Centre for Particle Astrophysics in Illinois) believes he has found evidence within the data of the gravitational wave detector GEO600, which could be interpreted as that of a holographic Universe. He adds: his conception of the data, could explain 'noise' that has yet to be explained.

The British-German team behind the GEO600, expect to carry out further experiments which may yield more evidence in the time ahead. Professor Bernard Schutz of the School of Physics and Astronomy, and member of the Gravitational Physics Group at the School, has expressed his interest, and the need for controlled experiments. In his view "Such an experiment would herald a new era in fundamental physics." [Reference to pages 40-43 appears also on page 45.]

11. The discoveries conveyed within this 'Section Two' contribute collectively – a valuable advance in nuclear medical physics, revealing a need for 'FIELD ENERGY' to be maintained at the speed of light *c*, in support of serious health reasons which are independently corroborated medically.

Within 'Section Three' of this White Paper, an understanding is provided concerning the subject of 'ADVANCED MEDICAL TREATMENTS'. Therein the term 'field energy' is referred to on a number of occasions. Readers will need to have an appropriate comprehension of the term 'field energy': this can be gained by a suitable understanding of certain implications for medicine, appertaining to the significant advances contained within this 'Section Two' – implications we are now to draw to the reader's attention.

- a. The OXFORD DICTIONARY includes the following reference to the term 'field', when applied to electric particle energy. "9a the region in which a force is effective (gravitational field, magnetic field). b the force exerted in such an area."
- b. Within item 2. on pages 20-21 the reader was informed an advanced understanding of **quantum gravity** indicated quarks comprise the energy of gravity: collectively the proton comprises 2.2674 x 10²³ fundamental gravity photons (fgphs) the neutron "2.2705 x 10²³ " " " " " the electron "1.2349 x 10²⁰ fgphs: please refer to item 22, pages 149-150.

['Evidence suggests subatomic particles could defy the standard model' by David Thornton. Refer Reference 21, page 149. http://phys.org/news/2015-08-evidence-subatomic-particles-defy-standard.html?]

These ultra-minuscule electric particles combine to form respectively the 'collective number' of electrically plus and minus fgphs which form the quarks of the proton, and neutron, also the quarkels of the electron.

The fgphs provide (in part) an electromagnetic link between protons and neutrons within the nucleus of matter, and thereby also the electromagnetic 'field' associated with the fractional electric charges known as quarks and quarkels. All of which exert the electromagnetic 'field energy' of gravity, and thereby the gravitational and electromagnetic 'field energy' exerted to form matter. Radiation is also formed by fgphs and is thereby allied in its electrical nature to the electromagnetic 'field energy' of particle physics.

c. On page 23 within item 3 it was indicated: each fundamental gravity photon (fgph) is displaced-in-time by its waveform (wavelength). The fgph comprises in immense numbers the fundamental electrical component of atoms – each associated with a wavelength ~ as depicted below:



The 'linear arrow' reflects the displacement-in-time of the electric particle 'field energy' – the action gives rise to a displacement-in-time as the fgph completes its pathway: in this way enabling the formation of the most ultra-minute single wavelength forming a standing wave.

THE ABOVE IMAGE MAY THUS BE UNDERSTOOD to result from a fundamental particle of energy *in the form of* an electric particle gravity photon (fgph) – displaced *by its waveform* over a distance-in-time: in this manner producing a wavelength.

d. Radiation comprises a frequency of wavelengths formed by single fgphs. The displacement-in-time associated with each photon is designated by its wavelength: the distance-in-time of the wavelength is set by the frequency hertz. Radiation operates normally with a 'field energy' speed equal to that of light c. [Visible light can appear white, but is actually made up of a spectrum of electromagnetic wavelengths between red and violet: the variation in the colours of the visible spectrum, results from each colour having its own wavelength and thereby a specific frequency hertz.]

Radiation that operates with a 'field energy' which is <u>less</u> than normal (*i.e. less than the speed of light c*) is referred to by use of the term radioactive, or radioactivity.

Matter is formed by a nucleus of atoms comprising (with the exception of hydrogen which has no neutron) –

- (i) **protons and neutrons** that consists of **quarks**, comprised of fractional electric charges in combination with
- (ii) **electrons** that orbit the latter nucleus are formed by **quarkels**, which comprise of fractional electric charges. Item 1, pages 19-20.
- (iii) **The ultimate particle** which forms *all* the components of matter and radiation, **is the fundamental gravity photon (fgph)** as stated within 'Section Two', item 2, on pages 20-21 of this White Paper.

- e. When electric particle 'field energy' passes through an element of <u>normal matter</u> the components of atoms which comprise that matter causes resistance to the electric particle energy, this slowing down the flow of electrons *for example* through wire or water. The 'field energy' however remains *always* constant at the speed of light *c*. The flow of electric particle energy <u>within matter which is radioactive</u>, will have a 'field energy' speed that is <u>less</u> than *c*: the 'field energy' here will carry the radioactive speed.
- f. Within the foregoing depiction of the 'displacement-in-time' referred to in item 3 pages 23-27 (which applies to each single fundamental gravity photon), there exists data appertaining to the 'characteristic' of each photon. Within pages 40 to 43 you will read of matters confirming that a number of eminent scientists have realized there is 'something else' associated with atoms that accounts for its mass, and thereby the 'difference' which exists between the *otherwise* unaccounted for data associated with one type of atom or another.

In part only, when associated with the latter 'something else' – the knowledge contained within pages 30-34 indicates, an ultra-abnormal 'field energy' speed has been involved within the universe, at too great an electric particle 'field energy' speed for matter to any longer exist within the time frame of the universe. CONVERSELY and forming a parallel in terms of nuclear 'medical' physics – when 'field energy' is operating at too slow a speed, an electrically abnormal pathogen is created, which has a lethal potential for patients suffering from any of a number of serious health problems named within 'Section Three'. We refer to health conditions which the profession acknowledge to be difficult or 'seemingly' impossible to treat, while limited *only* to existing levels of medical knowledge which lends themselves to approval by peer review.

PEER REVIEW is a process which requires advances in science or medicine to be examined by 'an equal or authority' – an independent position which none can be shown to occupy at this time, when (as made abundantly clear within this White Paper) knowledge beyond the Standard Model is presented.

The required knowledge exists and is understood at levels comprehended by the human mind beyond the Standard Model. The very serious medical issues associated with this position, have been conveyed within the *necessary* contents of 'Section One' of this White Paper. The needs and consequences will become even more apparent, once the realities expressed within 'Section Three' have been suitably studied, understood, and where necessary even further clinically trialled successfully.

It is almost certainly the case: this Partnership understands **the Higgs Particle** in the light of nuclear physics which *with respect* is more highly advanced than known presently to scientists at CERN. [Knowledge which this non-profit Partnership is willing to provide (*if necessary at cost*) to interested parties, both in terms of the nuclear physics <u>and medicine.</u>]

12. <u>Because we come near to the conclusion to this 'Section Two'</u> – we draw to readers'

attention a number of matters that are to be suitably detailed within 'Section Three'.

- (i) **Low-level radioactivity** is *known to be* widespread within the natural environment: radioactive radiation is formed by electric particle 'field energy' at a **velocity which is less than the speed of light** c.
- (ii) **Toxic chemicals** interfere with the natural capability of DNA or RNA to <u>resist</u> the distortion at subatomic level which is caused by radioactive electric particle 'field energy'. A carcinogenic compound will damage this capability, and do so within a shorter period of time than <u>less</u> toxic chemicals the collective effect of the latter having eventually a similar effect to that of one carcinogen.
 - a) All chemicals are toxic to some degree, where foreign to the DNA/RNA.
 - b) An advanced understanding of nuclear medical physics confirms beyond doubt the 'collective effect' of numerous chemicals of low-toxicity, have the identical effect of one carcinogen.
 - c) It is the 'collective effect' of low-toxicity chemicals, which underlies the cause of most cancers and other versions of electrically abnormal pathogens whether they take the form of a cell, protein, bacterium, virus, or gene.
- (ii) **Electrically abnormal pathogens** are radiosensitive and caused by the data of the DNA/RNA becoming distorted, resulting from a slowing of the electric particle 'field energy' speed of the atoms that comprise specific base pair atoms.
- (iii) The electric particle energy of the 'base pair atoms' is formed by fundamental photons. Each fundamental photon carries data, displaced-in-time by its electric particle 'field energy'. If or when that displacement-in-time becomes slowed to less than the speed of light c, due to the influence of (usually) low-level radioactivity within the natural environment, the data is distorted resulting in an electrically abnormal pathogen becoming formed by the DNA or RNA.
- (iv) **Briefly** the underlying cause of those health problems to which the above refers, is that of a foreign interrelationship between toxic chemical(s) on the one hand, and *seemingly innocent* low-level background radiation within the natural environment on the other.
- (v) **Efficacious treatments** are to be described suitably within 'Section Three'. The references therein are to concern
 - a. Two forms of treatment that have been medically trialled by university research teams we refer to *independently* proven methods of treatment, yielding efficacious outcomes for up to 95 per cent of the cancer patients treated.
 - b. <u>A further treatment</u> is detailed, which awaits the introduction of suitable new medical equipment. This new equipment will enable the treatment of a number of serious health problems, including drug and antibiotic resistance:

the nature and application of the equipment is specified.

- c. There is an additional need of equipment for the treatment of Electron Replacement Therapy (ERT); the means of which is known. The result after treatment with ERT, is *photographically* illustrated later in this White Paper.
- 13. Readers who have considered the scientific contents of this 'Section Two' are likely to be aware:-
 - (i) The nuclear physics reflects a number of significant advances.
 - (ii) The knowledge concerned, is at levels beyond the Standard Model.

Sufficient published corroboration exists from prestigious research organizations to confirm, these are not matters to be taken lightly.

'<u>Section Three</u>' will indicate to the reader certain understandings – appertaining to the underlying cause and treatments associated with 'electrically abnormal pathogens' responsible for up to 95 per cent of cancers and a number of other serious health problems, including 'drug and antibiotic resistance', also 'NDM-1'.

During the prolonged absence of the foregoing advances in nuclear medical physics presented within this 'Section Two' – the profession have *until now* been limited in their researches, to treatments that focused upon the symptoms of the diseases concerned, and not upon the underlying cause which (*it is now apparent*) could only be fully comprehended with the assistance of advances in nuclear medical physics.

With great respect for the considerable advances so far achieved by the medical profession, a growing number of senior members of the profession are now aware, there exists a need for new knowledge. Among them Dame Sally Davies, Chief Medical Officer for the Department of Health, London, England – who has been outspoken concerning the dangers involved that threaten medicine and will remain, until that time when 'new knowledge' becomes available to the profession.

A new mindset will be required: this may best be handled by a new division within the profession, under the heading Nuclear Medical Science. The broad profession needs to be embraced and thereby have access to suitably worded terminology that many may consider to be straight forward in terms of the presentation employed.

SECTION THREE to this White Paper, is presented as such a dissertation.

The foregoing Supplementary 'Reference' Information 1 to 13 is complete to this page. [Updated June 2019: please refer to Professor Andy Parker, pages 152-153.]

<u>Supplementary 'Reference' Information</u> continues on page 145, in support of the following –

SECTION THREE.

Advanced Medical Treatments.

Abstract.

Sufficient information has been provided within 'Section Two' of this White Paper, to enable a suitable presentation of new treatments, which have already been independently trialled and proven highly efficacious on behalf of patients with Cancer. This scientific knowledge and its medical applications when applied to the latter serious health problem, have been shown to be remedial for pathogens which are radiosensitive. Up to 95 per cent of primary cancers are radiosensitive: up to 95 per cent of cancers respond to the treatments indicated within this 'Section Three'. The treatment for some radioresistant cancers, is also known.

Similar successful treatments are possible for a number of diseases, which the medical profession find either difficult or 'seemingly' impossible to treat.

Closely parallel medical physics also explain the 'mechanism' by which pathogens can become resistant to drugs. The NDM-1 resistant gene is also understood and explained. Both of these serious medical problems are considered treatable.

Advanced nuclear medical physics indicates a viable approach to the treatment of drug and antibiotic resistance. New equipment will be required *only* to facilitate the needs of an efficacious treatment for those health problems referred to latterly here: *also* those patients with any of a number of diseases which are to be named herein.

INTRODUCTION – (to which we referred on page 38).

During the spring of 2008 the Senior Partner, Consultant Robert Wood-Smith, presented a report headed:

'Medical Science is in Crisis, Worldwide'.

Among a few respected members of the medical and scientific community who received the initial presentation of the report, was SIR LIAM DONALDSON, CHIEF MEDICAL OFFICER, DEPARTMENT OF HEALTH, London, England. The Senior Medical Officer, GEOFF RIDGWAY MD. BSc. FRCP. FRCPath., wrote to Robert Wood-Smith (Consultant & Authoritative Adviser in Radiation-induced Genomic Instability) on the 3rd June 2008, requesting detailed information under five subject headings, four aspects of which are seen to be directly pertinent to the needs of this White Paper. With this in mind these subject matters are summarized briefly as follows.

i) Microwave therapy was at the time a highly successful, but not widely known, 'new treatment' for Cancer: concerning which detailed information was now being invited from Robert Wood-Smith (RWS) by the Senior Medical Officer on behalf of Sir Liam Donaldson. The subject of 'microwave therapy' was selected as most appropriate to be the '1st' of the requested five reports. The Reason: together with photodynamic therapy, the new techniques were understood by RWS to have the capability for development to treat a significant proportion of all primary radiosensitive cancers, worldwide.

On the day the above request for detailed reports arrived from the Department of Health, London, England: Consultant Liver Surgeon David Lloyd, MBBS. FRCS(ENGL). MD. – who had developed a new Microwave Therapy in association with universities at Leicester and Bath, England – contacted the author of this White Paper to say, that his Chief Executive had forwarded to him the report 'Medical Science is in Crisis, Worldwide', which David Lloyd "read with some considerable interest". The Surgeon conveyed "I would welcome the chance to speak with you. Would you like to set up a meeting?" Meetings took place in June and October 2008. David Lloyd is familiar with the contents of the eventual detailed report to Sir Liam Donaldson: suitable aspects of which are to be conveyed within this 'Section Three'.

- ii) The Senior Medical Officer, Geoff Ridgway, invited information also concerning **Photodynamic Therapy** in respect of which he advised RWS, that he was "aware of Prof Wilson and Dr. George's work at UCLH" (University College London Hospital) where at one time he had been "working on MRSA and photodynamic inactivation with them".
- iii) Knowledge concerning the "management of bloodstream infections" was a further subject matter requested from Consultant RWS.
- iv) The Senior Medical Officer's letter of 3.6.2008 from the Department of Health, referred to "a need to review continuously the rules or protocols that govern decisions." Geoff Ridgway added "This is of course, an argument that all would agree with." The letter included a request for "a protocol of precisely what you and your associates perceive as the way forward."

This 'Section Three' provides in part, a detailed knowledge of 'Microwave Therapy'.

An Internet page is reproduced below *with permission* headed: "University of Leicester ~ Life-Saving Cancer Treatment Pioneered ... http://www2.le.ac.uk/ebulletin/news/press-releases/2000-2009/20....

NEWS - PRESS RELEASES



Life-Saving Cancer Treatment Pioneered in Leicester - an International Success.

Cancer patients who were given just weeks to live by doctors are living for several years thanks to a ground-breaking cancer treatment that was discovered at Leicester Royal Infirmary (LRI).

Mr David Lloyd with patient Kathleen Taylor

Press release continued:

Seven years ago, Mr David Lloyd, consultant liver surgeon at the LRI and clinical tutor in surgery at the University of Leicester medical school, came up with the idea of placing a tiny probe into liver tumours to blast them with microwaves. University of Leicester medical students have also worked on the research.

To date, almost 100 patients diagnosed with inoperable liver cancer (terminal cancer) have been treated with the technique and in 95% of these patients the cancer disappeared. The best results are in those patients receiving chemotherapy as well to help reduce the chance of cancer re-occurring elsewhere, but patients' life expectancies increased, in some cases by several years.

One of these patients was Maureen Horney, from Sussex. She said:

"When I was first diagnosed with liver cancer I contacted the Mayo Clinic in America for advice and doctors told me my tumours were untreatable. They gave me a maximum of six months to live. I then found out about Mr Lloyd's unique microwave probe and I am now alive and well - four years after being diagnosed with cancer."

Dr Lloyd said: "Thousands of patients die each year from the effects of liver cancer either because the disease is unresectable (cannot be removed surgically) or it does not respond to chemotherapy." "The microwave machine which has been developed at UHL can treat very large tumours within a few minutes. I have now treated nearly 100 patients and over 200 cancers. The microwave device is extremely safe, very effective and easy to use and is proving to be a significant advance in the treatment of liver cancer."

The microwave treatment has attracted attention from experts worldwide, so much so that Dr Lloyd has been asked to talk about the ground-breaking treatment at a number of international meetings. Dr Lloyd has addressed the Prime Minister of Malaysia, where liver cancer is endemic, the American Congress of Surgeons, the European Hepatbobiliary Association and is due to chair and speak at the next World Congress of Liver Surgery meeting in Las Vegas, USA, in September 2007.

[End of Press Release.]

Referred to on pages 93.102 and 104.

IT IS THE UNDERSTANDING OF THE PROFESSION ~

Hepatocellular carcinoma is considered responsible for 80 - 90% of all liver cancers. This form of cancer occurs in men more than women, mostly among people 50 to 60 years old. This aspect of the disease is more common in parts of Africa and Asia, than in North or South America and Europe.

Associated with liver cancer is often cirrhosis – scarring of the liver. Cirrhosis can be caused by alcohol abuse; viral hepatitis (*primarily hepatitis B and C*); hemochromatosis; specific autoimmune diseases of the liver; also certain other diseases which result in chronic inflammation of the liver.

The American Liver Foundation indicates: over 80 per cent of liver cancer cases in the United States are linked to cirrhosis: the most common cause for cirrhosis in the United States, is alcohol abuse. [Hepatitis C and alcohol abuse are *in general*, the leading causes of cirrhosis.]

Cancer of the liver can be divided into cases considered either 'primary' or 'secondary'.

<u>PRIMARY cancer originating in the liver</u>. In the United Kingdom, primary liver cancer is said to account for very few of the cases diagnosed each year. Worldwide, it is one of the most common cancers: which raises questions concerning the way in which cancers are diagnosed, or the terms of reference are being applied.

<u>SECONDARY</u> (metastatic) liver cancer - reaches the liver by spreading through the blood system from a primary tumour at a separate site: most commonly from cancers of the bowel, lung or breast, pancreas, and stomach. From the standpoint of the profession, the treatment of secondary liver cancers can be different to primary liver cancer.

With respect, there remain certain anomalies within the presentation of liver cancer by the profession. There is a need for clarification and investigation drawing upon the latest advance in scientific knowledge, which this White Paper is to make available to the profession.

The scientific understanding of this Partnership reflects at this time, aspects of the most advanced knowledge of fundamental nuclear medical physics available anywhere within the scientific community worldwide.

WITH DEEP RESPECT FOR THE EXISTING KNOWLEDGE OF THE PROFESSION ~ the descriptions provided above, are symptomatic of the disease. The need is to illumine the mind with knowledge applicable to the fundamental underlying cause of Cancer(s): a subject very largely understood in proven scientific terms by this Partnership.

In order to assist the reader come to terms with the need for an open mind; you are invited to consider the reality, which has context with the information that now follows.

Deaths from cancer worldwide in 2012 were 8.2 million (source – the World Health Organization). During the past decade, deaths from cancer have exceeded 75,000,000. How many are known to have died from cancer within the country of the reader?

Consultant Liver Surgeon David Lloyd MBBS. FRCS(Engl). MD. and the author of this report, both live in the United Kingdom, where more than 150,000 cancer patients died within the past twelve months: some 8,200,000 cancer patients died worldwide during the same period. Within the industrialized world, one in three can expect to develop a form of cancer at some stage during their lifetime: *two in five, may now be nearer to the true figure*.

With respect, such a significant number of deaths from cancer points only too clearly, to an existing lack of knowledge, associated with certain vital aspects of the underlying

fundamental cause and treatment of this disease.

The author (in the not distant past) was invited to attend 'THE IXTH INTERNATIONAL WORKSHOP ON RADIATION DAMAGE TO DNA'. Robert Wood-Smith (RWS) listened to 43 of the 45 lectures given during the Workshop: the subject matter in each case, addressed only the 'symptoms' of the disease. In due course, RWS asked the following question of one of the lecturers: "If I were your doctor and you visited me to discuss the treatment of a cancer, and I said to you – We can discuss either a treatment associated with the 'symptoms' of your cancer: or, would you prefer we discuss treatment of the 'cause'? What would be your reply?" The medical research specialist replied, immediately: "I would want you to treat the 'cause'." In every instance where RWS has put this question to members of the profession, the reply has always been the same.

QUESTION: what is the underlying cause of cancer? The answer to this question is now understood and is explained within this White Paper – prior to detailing for the reader an advanced treatment for cancer, which has resulted in an efficacious level of success equal to 95 per cent, achieved during an independent 'university supported medical trial' involving nearly 100 patients and 200 tumours (formerly considered untreatable).

It has been the experience of the author (RWS) these past 16 years, when communicating with senior members of the medical profession – there are understandable reasons why most members are significantly more familiar with the subjects of biology (*in some instances microbiology*) or chemistry, than can be said to apply to the subject of physics.

To illustrate the position to which we refer. (i) A highly respected member of the medical profession advocated this Partnership present for peer review, specific knowledge that was no more advanced than 'sixth form' physics. (ii) The Chief Executive for a well-known cancer research organization wrote to say, "physics is not my forte": adding, there was no physicist on their research team. With the deepest respect, the need is for a new mindset, or *quite literally* an immense number of patients are going to continue to die, quite needlessly.

ADD TO THIS SCENARIO the reality: there is a need for members of the medical and scientific community to now move on, and be able to understand new scientific knowledge which is in advance of that previously known to the scientific community. In such circumstances as these, the need arises to consider a means by which an 'easy read' may enable the presentation style to be sympathetic to readers from different backgrounds. Perhaps we may agree – there is very little value in simply being correct, *only* in being understood.

REMINDER. Standard science or matters known generally to the scientific community, will be printed hereafter in a normal 'black typeface'. Where that knowledge may be new to the reader, the information can and should be accepted as correct.

New scientific knowledge will be presented in a 'blue typeface'. The purpose will be to enable the reader to be aware, the information concerned is (at least in part) 'new and advanced'.

Wherever possible and where the knowledge is vital, published science will be provided to corroborate. *Occasionally* information of importance is highlighted in red.

The knowledge presented within this White Paper reflects (*in part*) new ground. With great respect, common sense approach is required ~ instead of a rigid protocol which fails to recognize the needs of the profession or, most important, the needs of the patients who are at the sharp end of the health problems to which this 'Section Three' is to refer in detail.

1. A pointer to a problem, where physicists are concerned. An eminent European scientist wrote to our Senior Partner to convey – "Normally we would not equate energy with velocity". NOTE. The fundamental physics which explains the underlying reason why cancer cells are propagated by the DNA, concerns an abnormal difference in electric particle 'field energy' speed. The latter 'abnormal' speed difference, is associated with up to 95 per cent of primary cancer cells.

In effect – the *last* mentioned communication implied *unwittingly*, a reason why the medical profession have not yet understood the underlying cause of cancer: a difficulty which relates specifically to an area of medical physics, which has been insufficiently examined and understood by the scientific community. GIVEN FACTUAL KNOWLEDGE OF THE UNDERLYING CAUSE, the mechanism and treatment applicable to Cancer will be apparent to many scientists, who will then be in a position to consider the presentation of relevant new scientific knowledge from a much needed and logical medical standpoint.

2. The significant advance in scientific knowledge made by this Partnership – was associated in the first instance with the Senior Partner and a physicist colleague having realized in 1994, the existence of *formerly unknown particle components comprising the electron. [*A reality corroborated by the Award in 1998, of the 'Nobel Prize in Physics' to three scientists in USA.] By combining an understanding of the values of these components with other known physics, the Senior Partner was enabled to formulate gravity for the first time in the history of science.

Many eminent scientists are well aware that when quantum gravity is more fully understood, a number of important 'grey areas' in physics will be resolved.

The source and workings of quantum gravity are now understood by the Senior Partner, who has been encouraged in recent times by independent professionals, to consider the preparation of a new book – 'The Ultimate Theory of Everything'. Quantum gravity has yielded a number of derivatives, one of which explains matters of vital importance to medical research: we refer to knowledge previously unknown to the scientific community.

No criticism is implied to those in medical research when suggesting that, comparatively little research has been carried out concerning the nuclear level appertaining to living tissue. All matter including human tissue is *of course* formed by atoms. The underlying cause of *all* cancers is associated with and explained by advanced nuclear physics at subatomic level. Hard evidence of this is provided within the pages that follow, which includes corroboration(s) by independent research organizations of high repute.

THE UNDERLYING PHYSICS -

to advance the knowledge of a profession in whose care *with respect*, approximately 8,200,000 patients die *currently* worldwide each year.

Note. It is often customary for 'corroborating evidence' to be provided at the conclusion of a scientific report. Many lives will depend on those who are to consider the knowledge within this report, feeling able to give credence to and understand the information that is to be provided. With the latter in mind: because the time and need for identifying 'corroborating evidence' in support of an advance in 'medical physics', is immediately following the statements concerned – published evidence is to be provided within this vital report, at those stages where the need arises.

Vital scientific knowledge is summarized within items 6 to 15 that follow – and thereafter to the conclusion of this 'White Paper' – in support of medical research, the medical profession, and potentially millions of patients worldwide.

- 1. All matter and therefore human tissue is formed by atoms.
- 2. Atoms comprise of electric particle charges: the largest of which are *of course* protons, neutrons, and electrons.
- 3. Protons and neutrons comprise of fractional electric particle charges known as quarks. Robert Wood-Smith (RWS) *author of this report* predicted in 1994, that the electron *also* comprised of fractional electric particle charges; the values of which he indicated at the time. Subsequently the 1998 Nobel Prize in Physics was awarded to three scientists in the USA, honouring their discovery that the electron did *indeed* have fractional component charges. [Refer 'Section Two', item 1 pages 19-20.]
- 4. During the last quarter of 1994 RWS realized knowledge of the components comprising the electron, when placed appropriately with other known science, yielded the formula for gravity. Knowledge of the formula, source and workings of gravitational energy was then *and remains today*, described as the Holy Grail for physicists. As stated, eminent physicists acknowledge, the understanding of quantum gravity will resolve a number of 'grey areas' in physics. [Derivatives thereof can now be shown to explain *also*, much of significant value to the medical profession on behalf of its patients across the world.]
- 5. RWS formulated gravity and invited an independent scientist to validate the findings. Albert Mantiziba BSc.(Hons.) Chem.Eng. acknowledged in due course he "had spent three months seeking to destroy the formula with sound physics". His conclusion "All I have been able to do is to confirm, the formula for gravity is correct."
 - The above scientist discussed with RWS one evening each week for the next seventeen months, the 'implications and derivatives' which were to be understood by the normal process of logical application of the 'advance(s) made in nuclear physics'.
- 6. A highly advanced knowledge of 'Quantum Gravity' indicates, quarks will be

found to comprise the energy of gravity. RWS discussed this with Albert Mantiziba who, in July **1995** *and with indirect help from the Max Planck Institute* established the following subatomic components comprise fundamental photons (fphs).

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The proton comprises approximately 2.2674 \times 10^{23} gravity photons (fgphs). The neutron " 2.2705 \times 10^{23} " " " . The electron " 1.2349 \times 10^{20} fgphs: see item 22. p.149-150.
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These combine to form respectively the quarks of the proton and neutron, also the electron's quarkels (the latter a name given by RWS in 1994 to this component).

7. 'Corroborating evidence' was published subsequently by the journal 'SCIENCE' in February 1996. The reader is referred to item 2 on pages 20-21 of this 'Section Two' and to "CORROBORATION", wherein you already have *or may now* read — William Carithers of the Fermi National Accelerator Laboratory observed: "This is just the sort of effect you would see if quarks were not fundamental particles, but had some sort of internal structure." Chris Hill, theorist at Fermilab added, "It would suggest that whatever lies inside the quarks is incredibly tightly bound, in a way that theory can't yet accommodate." [Refer also to Supplementary 'Reference' Information 17. on page 148.]

IT IS APPROPRIATE TO NOTE – During June of 1996 (i.e. the 17th month of a detailed preparation of data, associated with the advances they had so far made in their knowledge of quantum gravity and its derivatives) Robert Wood-Smith (RWS) and Albert Mantiziba now approached completion of a 'very necessary' stage of that which was to prove to be – a further development of the advanced nuclear medical physics within their understanding.

It was at this time, RWS realized

- **a)** They had uncovered the underlying reasons how and why DNA commenced the propagation of 'abnormal' proteins and cells. These are pathogens, which the medical profession find difficult or *seemingly* impossible to treat or understand.
- **b)** RWS understood with a degree of certainty: the potential existed for a remedial treatment of the electrically abnormal pathogens concerned. A DECISION WAS MADE by RWS, to set aside *for the immediate future* the presentation of quantum gravity. Priority would be given to the presentation of advanced scientific knowledge for the information and guidance of the medical profession.

The Eminent Environmental Epidemiologist Rosalie Bertell PhD. (who was to become an Associate Partner at a later time) wrote to RWS concerning his intended presentation of science for the guidance of the medical profession – "Part II is excellent. You have moved significantly toward fruitful communication with the medical community."

Professor Elena Burlakova, Deputy Director, Emanuel Institute of Biochemical Physics, Moscow, and Head of the Scientific Council on Radiobiology in Russia, wrote concerning the subsequent reports: "Thank you for your letter and the

information about the interesting and up-to-date ideas and studies carried out by you and the Partners. Many Russian scientists share the opinion that low-level irradiation exerts a definite effect on DNA, membranes, and other essential components of a cell. It is possible that these effects are responsible for a number of diseases. Moreover, scientists at the research institutes of the Russian Academy of Sciences investigate actively into specific proteins, their properties and effect they produce on the human organism."

"My colleagues and I would be interested in and appreciate reading your Series of Presentations: Parts 1 and 2 and, in due time, Part 3."

Subsequently she wrote to convey: "Thank you so much for two parts of your PRESENTATIONS. I see that these reports are very interesting for many of our scientists and medical men, particularly for persons who study the problems of mechanisms of radiation effects and radiation protection." "I hope for our further collaboration."

WITHIN THE UK HOWEVER progress became blocked by protocol and powerful vested interests ~ until a door was opened on the 3rd June 2008 by the contents of a letter from **Geoff Ridgway the Senior Medical Officer**, **Department of Health, London, on behalf of Sir Liam Donaldson** (Chief Medical Officer) seeking five specific detailed reports from this Partnership.

Section Three of this White Paper

will enlarge on 'appropriate aspects' of the 1st of the five reports which this medical research team was invited to provide.

- 8. The electric particle 'field energy' speed of the fundamental photons comprising the components of atoms referred to in items 6 and 7 (pages 54-56) at its natural level, is the speed of light c.
 - The latter knowledge will be shown to be important to medical research in the following vital connection: the electric particle 'field energy' speed of radiosensitive atoms is less than the speed of light c. Conversely: the term radioresistant, applies to pathogens which comprise of atoms energized at a normal electrical speed: *i.e.* an electric particle 'field energy' at the speed of light c. [Note. The latest and most advanced 'scanning' equipment indicates: up to 95 per cent of primary cancers are radiosensitive. More is conveyed upon this subject matter within item 12, which commences on page 60.]
- 9. **Up to 95 per cent of** *all* **primary cancers are *radiosensitive:** a similar <u>electric particle state</u> applies *also* to a number of other serious health conditions. The underlying cause of this electric particle 'field energy' characteristic, is associated with low-level radioactivity, which exists *widely* within the natural environment. **A** 'toxic effect' however is needed, prior to the DNA or RNA commencing to propagate an abnormal *radiosensitive agent of disease: this will be explained, after we have provided suitable knowledge of the slower moving abnormal electric particle energy which scientists refer to as 'radioactivity'. [*Radiosensitive implies: will respond to 'appropriate' treatment with electric particle 'field energy' at the speed of light *c*.

Additional information is to be provided suitably, within a later stage of this 'Section Three'.]

Radioactivity exists widely within the natural environment. Radioactive 'field energy' is usually a low-level radiation – in the form of an electric abnormal particle state, emitted from soil and rocks and therefore also some building materials. Levels of radioactivity within the environment vary from area to area. In a few areas within the United Kingdom the level of radioactive radiation is such, as to cause a need for the provision of a protective screen to be laid over the foundations of new buildings, to reduce the level of radioactive radon gas seeping into the finished properties.

Radioactivity results from the decay of an unstable heavy element to one that is lighter. The mechanism which brings this about, is controlled by the Law of Conservation (LoC). For a heavy element to lose gravity (weight) – single particles or packets (referred to as quanta) of fundamental gravity photons forming part of the mass of the heavy element, have to become expelled.

THE MECHANISM – the LoC changes the electric particle 'field energy' speed of *only* a few gravity photons at any one time. This change to the 'field energy' – reflects a slowing down of the momentum of the decay particles, to less than the electric particle 'field energy' speed of the greater parent mass. By this process the now radioactive particles are thus caused to move away *naturally* from the greater mass (in that the atoms of the heavy element continue to operate electrically at the speed of light c). Radioactivity is the term that science has given, to the slower moving characteristic of the electric particle 'field energy' speed referred to here. A radioactive element has the characteristic associated with a continuous release of radioactive particles.

There are THREE ELECTRIC PARTICLE 'FIELD ENERGY' SPEEDS which are characteristic of **radioactive energy.** ALPHA particles: which travel at approximately 6 per cent of the speed of light c. BETA particles: that travel at 99 per cent $(or \ less)$ than the speed of light c. Also particle GAMMA rays: which travel at a speed so close to that of light, scientists can be forgiven for assuming the 'field energy' speed is that of light c however, astrophysicists have pointed in the recent past to a speed which, by a minuscule margin, is slower and 'applicable to gamma rays' from a distant source (in outer space) when compared with the speed of the light rays at c from the identical source. - (Refer item 23. pages 150-51).

The characteristic associated with radioactivity, is an electric particle 'field energy' speed which is <u>less</u> than the speed of light: a speed *therefore* that is out-of-sync with <u>normal</u> electric particle 'field energy' which moves at the speed of light c.

10. **The human genome** has in the region of 3 billion base pairs, each of which are formed *of course* by atoms: some of these 'base pairs' are associated with an estimated 20,000 to 25,000 protein-coding genes.

Medical researchers have a need to consider and understand -

a) The components that comprise the atoms which make up the DNA of 'healthy' tissue, have the 'characteristic' of electric particles energized electrically with a

'field energy' that moves (within a *standing wave) at a speed equal to light c. Whereas the atoms that comprise **radiosensitive** 'electrically abnormal pathogens', are formed by electric particle 'field energy' which is operating at less than the speed of light c.

[*The electric particle energy of atoms comprising living tissue *and thereby their components* comprise of 'field energy moving back-and-forth within a 'standing wave'. When isolated from atomic structures, the electric particle energy forming protons, neutrons and electrons operate at a speed which is determined by the Law of Conservation (LoC).]

b) Electric particle 'field energy' that moves at <u>less</u> than *c*, is radioactivity-induced (or will comprise radioactive matter itself). The radioactive-inducment of living tissue, results from the consequence of the underlying science described below within item 11.

REMINDER. An eminent European physicist advised the Senior Partner (RWS) – physicists have not considered there has been a reason to equate electric particle energy with 'field energy' speed. The medical profession have (in part for this reason) been left in the dark, concerning those areas of physics presented within this report in a 'blue typeface'. [The typeface in this White Paper which is blue: is provided in order to 'highlight' science that is either 'in part' or 'entirely' beyond the Standard Model.]

Most professionals are capable of a logical consideration of information *as and when it is provided*: but sadly, a proportion have allowed themselves to become convinced that someone else must always state whether or not *even* the obvious reality is to be recognized, especially when such knowledge is associated with new science. There is a need to review continuously the rules or protocols that govern decisions: many now agree, this is the current position. [See also page 60.]

- 11. THE MECHANISM which causes the DNA to propagate an electrically abnormal pathogen associated with a cell, protein, and *in some instances* a bacterium or virus reflects the following realities:
 - i) Nature provides a level of protection to atoms: in this way offsetting the long-standing existence of low-level radioactivity within the natural environment. If this were not so, there would be no life on planet Earth. This natural protection is however one that can be interfered with, when it becomes eroded either by toxic chemicals, or UVB radiation.
 - ii) **Carcinogenesis**¹⁹ the production and development of cancer is not as well understood as it might be. A carcinogen is accepted to be a chemical with the potential to cause cancer. That which has not been understood, is that the 'collective effect' of a number of less toxic chemicals will over a period of time have a similar effect to one carcinogen: *i.e.* expose DNA/RNA to low-level radioactivity within the natural environment.

NOTE. It has been indicated in the past, a Royal Commission was required to test more than 30,000 chemicals in daily use, which had not previously been tested for toxicity. The Head of the ROYAL COMMISSION ON ENVIRONMENTAL

POLLUTION, Professor Sir Tom Blundell, informed BBC News: "Given our understanding of the way chemicals interact with the environment, you could say we are running a gigantic experiment with humans and all other living things as the subject."

- Harmful (toxic) chemicals erode over a period of time the otherwise natural protection of DNA atoms: note please that where the toxicity is low, the erosion happens in minuscule stages and over a period of time. When that erosion has become sufficient the electric particle 'field energy' of these DNA atoms, is exposed to the slower moving electric particle 'field energy' speed of the widespread low-level radioactive particle 'field energy' within the natural environment.
- iv) The latter effect is one of distortion of the electric particle data, comprising the base pairs atoms of the DNA. The consequence of which is the development of radiosensitive electrically abnormal chromosomes, genes, RNA, proteins, cells, and (in some instances) bacteria. These in turn are associated with the pathogens of serious health problems, which the medical profession find presently to be difficult or seemingly impossible to treat.
- v) Replication by RNA of radiosensitive electrically abnormal pathogens (bacteria or viruses) is known to occur by a directly parallel mechanism: giving rise to abnormal cellular components, proteins, enzymes etc.

THE FOLLOWING ANALOGY MAY BE USEFUL. Readers are invited to consider the facility of a recording device, which has adjustable recording and play/back speeds. Picture if you will, a voice is recorded at the speed considered normal. Consider next replaying the same recording at slower speed: the result would be a distortion of the electrical information used to record — and while all the initial information is present, it is distorted and the voice cannot be recognized or heard properly.

The foregoing analogy, parallels the distortion which is caused to the data carried by the base pair atoms comprising the double helix of the DNA. The same distortion of data applies to the RNA's replication of viruses and transcription of DNA to messenger RNA (mRNA) – (DNA is transcribed to make RNA, which is then decoded to produce proteins).

The above mechanism(s) give rise to the propagation of electrically abnormal chromosomes, genes, RNA, proteins and cells. The latter reflect *for example* the underlying cause and characteristic of the electrically abnormal pathogen responsible for up to 95 per cent of primary cancers. [Refer also to Carcinogenesis: Supplementary 'Reference' Information item 19. on page 149.]

[RNA: molecular biology informs us – the flow of genetic data in a cell is from DNA through RNA to proteins: DNA enables the RNA to make proteins. DNA carries the genetic data needed for a cell to grow / take in nutrients / and to propagate – RNA in this role provides the DNA's data image for the cell. When however DNA becomes distorted – under the influence usually of low-level radioactivity within the natural environment (consequential to toxicity having eroded the 'natural protection' of the base pair atoms) –

the foregoing mechanisms we have outlined become changed: the data no longer reflects normality. See also <u>Supplementary 'Reference' Information</u> RNA and DNA, within item 20. on page 149.]

An electrically abnormal pathogen presents radiation-induced genomic instability.

- (i) This is a serious health condition: one which is consequential to the abnormal 'field energy' speed, which is carried *on the standing wave* of fundamental photons, comprising the subatomic components of the atoms of living tissue.
- (ii) Radiation-induced genomic instability' results from the distorting influence on subatomic data, of the slower than normal electric particle 'field energy' speed of low-level radioactive electric particle 'field energy', which is known *beyond doubt* to be widespread from soil and rocks within the natural environment.
- (iii) Toxic chemicals cause damage to the DNA/RNA by way of a carcinogen, or the collective carcinogenic effect over a period of time of *commonly* a multiplicity of chemicals of comparatively low-toxicity.
- 12. GIVEN THE ABOVE KNOWLEDGE (which may be considered proven beyond doubt or reservation) associated with the known underlying cause of all radiosensitive cancers knowledge that will be shown to apply also to a number of other serious health problems two of the most advanced scanners which are referred to in (a) and (b) below, indicate that up to 95 per cent of primary cancers are radiosensitive. The cells have a different electric particle 'field energy' time frame to normal tissue: see paragraphs (a) and (b) pages 57-58. This report will confirm the electrical difference is one which has been shown to be treatable, with a very high rate of efficacy.
 - (a) Robert Wood-Smith (RWS) principal author this report was approached in 1999 by Geoff Watts of the Imperial Cancer Research Fund, London, England. Dr. Watts indicated that John Stephens, Director of The Biofield Corporation, Georgia, USA, would be interested to receive 'additional knowledge' concerning recent operational results associated with the BIOFIELD DIAGNOSTIC SYSTEM (BDS). John Stephens raised subsequently the following question when speaking to RWS Why had there been a failure of the BDS to detect more than 95 per cent of 100 'known cancers', within a 'sample' number of people in a clinical trial involving 463 people? [John Stephens said to RWS that Geoff Watts had conveyed to him ~ the Partnership was the "most likely source of the information" which the Biofield Corporation was seeking to ascertain.] The above is referred to on page 103.

This Partnership provided subsequently for the advice of the Biofield Corporation a detailed report which, *in essence*, we summarize below:

i) Cancer cells (*with a radiosensitive characteristic*) give off less charge than normal cells (*i.e. have a lower frequency hertz*). The BDS measures changes in electrical potential on the skin surface associated with breast cancer.

ii) When used to detect the presence of breast cancer – the BDS scanner records a 'different' electric particle 'field-energy' characteristic, should it exist and be radiosensitive (i.e. not a radioresistant cancer).

The BDS scanner was not able to detect 5 per cent of the known 100 cancers within the trial sample. The reason for this was reflected the reality: 5 per cent of the sample cancers were radioresistant. That is to convey— the atoms of the cancer type which the BDS was unable to detect, were not comprised of the slower moving electric particle 'field-energy' characteristic of radiation-induced genomic instability: 5 per cent of the known cancers associated with the clinical trial were either ionization-induced, or resulted from an inherited abnormal gene.

RADIORESISTANT CANCERS are formed by atoms comprising electric particle 'field-energy' at the speed of light c: the velocity which is identical to the 'field energy' speed of normal atoms. The BDS equipment was designed to detect *only* the lower frequency electric particle 'field-energy' of radiosensitive cancers. [Up to 95 per cent of 'primary' cancers (also some considered 'secondary') are radiosensitive.]

(b) On 12th June 2003 it was announced — a NEW HANDHELD SCANNER had been introduced and was under trial by the San Carlo Borromeo Hospital, also at the European Institute of Oncology, both in Milan, Italy. THE TRIMPROB SCANNER can detect a variation in electromagnetic wavelengths between healthy tissue and cancerous cells. Using a beam of microwaves that vary between 400 and 1350 megahertz, when the electromagnetic signal comes into contact with biological tissue, it causes the cells to resonate at certain frequencies. Radiosensitive tumours generate a strong interference at around only 400 megahertz. Healthy cells, and tumours that are radioresistant, resonate at 1350 megahertz. [Reference to the above made on pages 83 and 119.]

Concerning the lower hertz of the latter two scanner readings – this results from the detection by the Trimprob of the lower frequency electric particle energy associated with the atoms of a radiosensitive tumour.

Confirmation of the presence of the radioactive' electric particle 'field energy' (associated with radiosensitive cancer cells) is indicated, by the characteristic slower speed (reflected by the abnormal time frame) of the electric particle 'field energy' comprising the subatomic content of the radiosensitive cancer cells. The slower speed of the 'abnormal time frame', gives rise to THE LOWER NUMBER OF FREQUENCIES PER SECOND recorded by the Trimprob.

BEYOND DOUBT:

- (i) A tumour which has a slower moving electric particle energy characteristic, generates a lower frequency, and for this reason can be identified as radiosensitive.
- (ii) A radio<u>sensitive</u> form of treatment will involve the utilization of an electric particle 'field energy' at the speed of light *c* being applied –

- (a) In such a way that the energy applied will elevate to normal, the subatomic electric particle speed of the electrically abnormal pathogen.
- **(b)** Suitably correcting the lower frequency hertz of the slower moving electric particle 'field energy' of the radiosensitive cancer cells.
- (c) Restoring the electromagnetic 'field energy' speed and frequency to light c.

Each of the organizations (BDS and Trimprob) responsible for the development of the advanced technology associated with the two different scanners referred to on pages 60-61 items (a) and (b), experienced initially some degree of lack of acceptance. This resulted from their equipment not being able to record <u>all</u> of the cancers present in any sample. Those testing either of these scanners would appear not to have understood, the three implications set out hereunder for the reader:-

- (i) Each of the two scanners were so designed they would detect <u>only</u> tumours which differed in their subatomic electrical 'field energy' from that which is associated with the 'normal' speed of light *c*.
- (ii) The atoms comprising radiosensitive tumours operate electrically at less than the speed of light c and would therefore be shown by either scanner to be of a different electric particle 'field energy' and frequency to that of healthy tissue.
- (iii) The underlying cause of radio<u>resistant</u> atoms, is NOT that of a slower electrically abnormal genomic instability. Radio<u>resistant</u> tumours have the electrical difference referred to within the next paragraph, headed IN REALITY. Whereas the radio<u>sensitive</u> health condition, results from a combination of effects involving (usually) low-level radioactivity within the natural environment this stimulating the DNA to trigger the eventual propagation of radio<u>sensitive</u> electrically abnormal pathogen cells.

IN REALITY – the radioresistant tumour comprises of cancer cells which have the same frequency and 'field energy' speed as normal tissue. The underlying cause of this radioresistant cancer cell type, is due to either:

- (a) ionization-induced genomic instability, or
- (b) the consequence of the distorting effect on DNA introduced by an inherited abnormal gene.

Should an independent logical analysis be established, those concerned would be in a position to realize:-

i) In each case where either BDS or Trimprob scanners detected a cancer: where the 'characteristic' of the cancer was indicated to be of the lower frequency hertz, and thus was *also* proven subsequently to be radiosensitive: oncologists could learn from these combined realities –

they were in a position to be certain, that in those future cases where patients' readings by either of the two scanners provide a positive identification of the presence of a malignant cancer – such a tumour would be suitable for an 'appropriate' remedial electromagnetic irradiation of the cancer. The tumours would be radiosensitive and thereby would respond to an 'appropriate treatment' with electric particle 'field energy' at the speed of light c.

Diagnosis would be supported by knowledge which is certain – in that cancers which were known to exist but were <u>not</u> detected by either scanner, would prove to be radio<u>resistant</u>. That is to convey: such cancers would either be <u>ionization-induced</u> or <u>the consequence of an inherited abnormal gene</u>. With the exception of ionization-induced cancers – which may be treated by Electron Replacement Therapy (*i.e.* the safe application of low-frequency (500 kHz) electric current, as per the knowledge within Reference on pages 145-48 – neither of the above underlined cancer types will respond to radiotherapy, or any other form of treatment that is suitable for radiosensitive pathogens.

The above 'knowledge' indicates – each of THE TWO NAMED SCANNERS CONCERNED (*i.e.* the BDS and the Trimprob) WOULD CONTRIBUTE TO 'MEDICAL DIAGNOSIS': saving time and money, also needless inconvenience and suffering for patients in instances where their respective cancers are radio<u>resistant</u> and cannot respond to treatments which are *only* suitable for radiosensitive cancers.

The **Biofield Diagnostic System** was developed as a specialist scanner for breast cancer. The **Trimprob** is suitable for a wider range of cancer types: also, the patient can remain dressed while the scan takes place.

[Note: the Partnership which prepared this White Paper has no vested interest in either of the scanners, or the manufacturers concerned. We are a wholly independent non-profit organization dedicated to the needs of science, medicine and mankind.]

13. In a few words.

ASPECTS OF THE ADVANCE THAT HAS BEEN MADE IN FUNDAMENTAL NUCLEAR PHYSICS INDICATES:

- (a) The serious health problem which is under consideration within this specific aspect of 'SECTION THREE', is Cancer: a disease that kills more than eight million patients worldwide each year.
- (b) **The underlying cause** that needs to be treated in the case of up to 95 per cent of 'primary' cancers is the abnormal *subatomic* particle 'field energy' speed, which reflects the medically sensitive characteristic of the atoms that comprise an 'electrically abnormal pathogen'.
- (c) The medical requirement appertains to the slower moving electric particle

'field energy' speed of the electrical energy, comprising the atoms of the radio<u>sensitive</u> cancer cells – the remedial treatment of which, is an appropriate elevation of the electric particle 'field energy' to the speed of light *c*.

Where the 'remedial treatment' has been carried out appropriately, this will correct the subatomic electric particle 'field energy' of the atoms comprising the DNA – thus enabling the data of the cancer cell to be decoded / the structure thereof seen as foreign / and thereby marked for destruction by the immune system.

- (d) 100 per cent of radio<u>sensitive</u> cancers will be found to respond to a suitable and fully 'appropriate' electric particle 'field energy' treatment. The cancer cells which do <u>not</u> respond to such a treatment, are those which are radio<u>resistant</u>. In those cases where the electric particle 'field energy' speed of the atoms comprising the tumour is 'normal' (*i.e.* is radio-<u>resistant</u>) the medical application of electromagnetic energy 'cannot' introduce the same remedial response which is *clearly* shown, when radio<u>sensitive</u> pathogens have been treated correctly.
- (e) There are a number of *other* serious health conditions, where the identical nuclear medical physics will be found to be applicable. Appropriate knowledge associated with the health conditions to which we refer, will be provided 'as an easy read' at a later stage within this 'Section Three'.

A GENTLE REMINDER.

Standard science and or matters known generally to the scientific community, are presented within this White Paper in a normal 'black typeface'. Where that knowledge may be new to the reader, the information can and should be accepted as correct.

New scientific knowledge is being highlighted by the use of a 'blue typeface'. The purpose - to enable the reader to be aware - the information concerned is new, advanced, and reflects 'medical' applications of the significant advances which have been made in nuclear physics, detailed for the reader within 'Section Two', pages 17-47. The application of logic applies in all instances, when applying 'derivatives' of the new science.

Additional terms of reference

for the convenience of those readers who are not physicists.

The electromagnetic field is considered in physics to be the region in which a particle with an electric charge experiences a force. **If stationary** – an electric field applies. **When moving** – a pure magnetic field applies. **Each can be present** – simultaneously.

ONE of the FOUR FUNDAMENTAL FORCES OF NATURE is **electromagnetism**: the other forces are known as **gravity**, **the strong nuclear force** (*which holds the nucleus together*) **and the weak nuclear force** (*responsible for radioactive decay*).

[Science recognizes that the elementary particle which is the carrier for the electromagnetic force, is **the photon**. The Partners who support this White Paper have been the first research team to understand: the **fundamental photon is the 'gravity photon'**. The proton, neutron, and electron are comprised of gravity photons.]

A summary headed "CONCERNING THE MEDICAL IMPLICATIONS" was presented within Section Two, pages 37-40).

On behalf of non-physicists and to assist understanding of the term 'field energy'.

OXFORD DICTIONARY. "**Field**": "the region in which a force is *effective* (*gravitational field*, *magnetic field*)". The interpretation within this White Paper: 'field energy' is an electromagnetic force that is effective in a given region.

14. A MAJOR PRESENTATION WITHIN THIS 'SECTION THREE' suitably enlarges aspects of an earlier report, associated with a highly successful new treatment under the heading 'Microwave Therapy for the Treatment of Cancer'.

BRIEF HISTORY.

- (i) A report (prepared by Robert Wood-Smith, the primary author of this White Paper) was acknowledged on 3rd June 2008 by Geoff L. Ridgway MD, BSc, FRCP, FRCPath, Senior Medical Officer, Infection Control & Blood Policy, Department of Health, London SE1 8UG, United Kingdom. The letter commenced: "Thank you for sending me your report titled Serious Medical Implications and Applications concerning Electrical Energy and its 'Field Energy' Speed. I note that this report was copied to the Chief Medical Officer, and I have been requested to reply on his behalf."
- (ii) The Senior Medical Officer's communication to the Senior Partner, invited five specific detailed reports. Robert Wood-Smith (RWS) decided to give immediate priority to the greatest need reflected by the 3rd of the reports that had been requested relating to a new treatment for cancer developed by the University of Leicester in the United Kingdom.
- (ii) THE SUBJECT MATTER concerned a new 'microwave treatment' for inoperable cancers. A university clinical trial conducted by **Consultant Liver Surgeon David Lloyd MBBS. FRCS(Engl). MD.** Honorary Senior Lecturer in Cancer Studies, University of Leicester; Consultant Hepatobiliary and Laparoscopic Surgeon, Leicester Royal Infirmary, Leicester LE1 5WW, United Kingdom. The findings confirmed: of nearly 100 patients with between them over 200 inoperable tumours, 95% were effectively treated by Microwave Therapy.

APPROPRIATE INFORMATION concerning 'Microwave Therapy' is — with sound scientific and medical reasons — to be preceded within this 'Section Three' by an advanced knowledge' of Photodynamic Therapy within item 15. commencing page 66, and thereafter up to that stage where the necessary information reaches item F on page 73 headed 'THE TREATMENT OF LUNG CANCER'. A Summary of THE SUBATOMIC MECHANISM follows on page 76 — subsequent to which a detailed understanding of 'Microwave Therapy' will commence on page 77.

The nuclear medical science understood by this Partnership confirms: MICROWAVE THERAPY has the 'potential' to be applied to all radiosensitive tumours, where the

oncologist considers it would be practical to insert a thin probe into a tumour for the purpose of irradiating an appropriate input of electric particle 'field energy' at the speed of light c. The worldwide utilization where appropriate of Microwave Therapy or Photodynamic Therapy could eventually apply in (conservatively) up to 80 per cent of all radiosensitive cancers. [Up to 95% of 'primary' cancers are radiosensitive: the 'new medical equipment' specified later in this Section Three, would treat most of the remaining cancers.]

It is the considered viewpoint of this Partnership: that the 'medical nuclear physics' which supports 'Microwave Therapy' can – *in certain vital and allied respects* – be seen to identify with and support those methods for the treatment of cancers which are *also* applicable to 'PHOTODYNAMIC THERAPY' (PDT). An advanced understanding of PDT is provided within this Section Three.

PDT may be used to treat an appropriate proportion of radiosensitive cancers worldwide. This is a technique which has been approved for use by the National Institute for Health and Care Excellence (NICE). Although the latter position is the reality, one very much regrets that only a few patients presently receive this treatment. One published estimate indicated that: "If the number of patients receiving the new treatment for skin cancer is low, for other types of cancer it is even worse. Just 300 cancer patients out of more than 300,000 were treated last year". [This extract formed part of an article by Jerome Burne (further information on page 69) who is one of Britain's leading medical health journalists and a contributor to 'Medicine Today'. Our grateful acknowledgement here to the 'Daily Mail' in the United Kingdom.]

The current reason for the 'reticence' of the establishment towards the well-proven efficacious medical use of PDT is associated with:

- (i) A 'widespread lack of knowledge' of the relevant nuclear medical physics.
- (ii) There exists a general misconception that there is no science that is not already known and therefore no adjustment is required for the purpose of peer review, to allow suitably for the review process in circumstances where (new knowledge is to be presented which is clearly beyond the Standard Model) vital aspects of which have been independently proven by some of the most prestigious research organizations known to the scientific community. [The reader is referred to advances in nuclear physics presented within 'Section Two' of this White Paper.]
- **15. In order to lessen scepticism** we present medical examples below which show how electric particle 'field energy' at the speed of light has effectively treated various radiosensitive cancers.

'MEDICAL EXAMPLES'.

A. Non-melanoma SKIN CANCERS are being treated with the method known as PHOTODYNAMIC THERAPY (PDT). [The Development of new applications of PDT, is one of the main research interests of the National Medical Laser Centre, based at University College London, England.]

THE PDT TREATMENT of a non-melanoma skin cancer involves:

- (a) The lesion will be prepared, by removing any overlying crust and scale.
- (b) A photosensitizing agent is applied by cream or spray to the lesion, also to a margin of the surrounding skin.
- (c) The amount of light reaching the sensitized skin must be reduced with a light occlusive dressing and left in place for a few hours.
- (d) Excess cream is removed, prior to the lesion being illuminated by light rays of an appropriate frequency.
- (e) A fixed-frequency laser light is used in combination with the chosen photosensitizing agent.

The irradiation of a specific frequency of light (obviously, at the speed of light c) upon radiosensitive cancer cells which have been enabled to absorb an appropriate photosensitizing agent – will cause the slower moving electric particle 'field energy' of the cancer cells, to increase in their electric particle velocity (within their standing waves) towards the speed of light c. Within a short period of time, the 'field energy' speed of the cancer cells (by averaging with the speed of light at c) will reach in due course the same 'field energy' frequency and speed as the irradiating light waves. In this way, the electric particle 'field energy' state of the cells is normalized: enabling the DNA to decode the data (associated with the original structure of the former radiosensitive cancer cells) as foreign, and thus mark them for destruction by the immune system.

THE EFFICACIOUS RATE OF SUCCESS can be as high as 90-95 per cent. The success rate will apply to 100 per cent of the radiosensitive pathogen(s) within any sample that has been suitably treated appropriately by the PDT process. [Electrically abnormal pathogens that do not respond to an appropriate treatment, will be radiosesistant. The atoms of such pathogens would already be energized electrically with a 'field energy' equal to the speed of light c: this occurs with ionization-induced genomic instability, or an inherited abnormal gene.]

WITH REFERENCE TO THE REMEDIAL EFFECT OBSERVED HERE ABOVE – applied to electric particle 'field energy' at the speed of light c when absorbed by the atoms of radiosensitive pathogen **cell(s)**, **bacteria** or a **virus infection** – THE 'EFFECT' WILL BE:

- (i) The irradiated *incoming* 'field energy' speed of the remedial particles (at the speed of light c), is certain to **average** in speed with the slower moving electric particle 'field energy' which comprises the ultra-minuscule power of the radiosensitive electrically abnormal pathogens.
- (iii) The latter slower moving electric particle 'field energy' speed of the radio<u>sensitive</u> electrically abnormal pathogens, **is thus bound to become elevated in velocity towards the normal speed of light: because the inflowing energy of light is being maintained at the velocity which is natural for particles of light a speed which science refers to as** *c***, and which reflects the electric particle 'field energy' speed of atoms comprising all normal tissue.**

Within a 'brief period' of time – THE INFLOWING IRRADIATED 'FIELD ENERGY' OF LIGHT, will have elevated the electric particle 'field energy' of the atoms comprising the former

abnormal radio<u>sensitive</u> pathogen cell(s), bacteria, or virus infection, to the normal speed of light c. The position thus reached means:

- (a) The electric particle 'field energy' speed of the atoms which form the base pairs of the double helix and which originates the DNA/RNA data associated with the above former radiosensitive electrically abnormal pathogens will have suitably changed their electric particle 'field energy' state.
- (b) This change in the electric particle state of the atoms comprising these *former* radiosensitive pathogens, enables the now normal DNA/RNA to decode the data that was used to construct the original cancer cell, bacterium or virus as 'foreign', and thus mark these abnormal pathogens for destruction by the immune system.

CORROBORATING EVIDENCE of the change of state referred to above, is widespread. Here below follows a suitably descriptive example from research carried out by the M.D. Anderson Cancer Treatment Centre at the University of Texas, Houston, USA:-

The 'New Scientist' 26th April 1997, page 18, in a report by Michael Day stated — "Omar Eaton and his colleagues from the M.D. Anderson Cancer Centre of the University of Texas in Houston have found that if melanoma cells are taken from a cancer, *exposed to UVB, then injected into the patient, they may boost the immune system's ability to fight cancer." "Exactly why this happens is not entirely clear. But Eaton's colleagues at the *M.D. Anderson Cancer Centre, led by immunologist Michael Pride, have shown that irradiated melanoma cells tend to have more of the key surface receptors that help the immune system to recognize tumour cells and mark them for destruction." "Only the cells that have been irradiated have the extra surface receptors." The *irradiation of the cells to UVB, constitutes exposure of the cancer cells to electric particle 'field energy' at the speed of light c.

*The electric particle 'field energy' speed of UVB is (of course) the speed of light c: electric particle energy which (within the above M.D. Anderson Cancer Centre research) had become integrated with the melanoma cells, in this way resolving it can safely be assumed an abnormal electric particle 'field energy' speed problem in the case of the patient referred to. [The reader will be suitably assisted by reading Reference¹⁴ on pages 145-147 wherein 'photographic evidence' is provided, indicating 'before and after' irradiation of malignant melanoma cells with electric particle energy at the speed of light c.]

THE 'CHANGE IN THE STATE' OF THE RADIOSENSITIVE CANCER CELLS.

The reality that the M.D. Anderson team "exposed" melanoma cells "to UVB": shows that the melanoma cells were integrated with electric particle 'field energy' at the speed of light c, in this way elevating the electric particle 'field energy' of radio<u>sensitive</u>' atoms to normal. For research purposes this step served to indicate a 'change of state' to which we refer — see below.

"Only the cells that have been irradiated have the extra surface receptors." – indicating that it is irradiation with energy at the speed of light c which gives rise to a required electric particle 'change of state'. The latter is necessary, before an 'electrically abnormal aspect' of the DNA can be enabled to recognize the radiosensitive cells as 'foreign', and thus mark them for destruction by the immune system.

It is to be noted: the atoms of radio<u>resistant</u> cells are (without exception) energized naturally with electric particle 'field energy' at the speed of light c. For this reason, the 'field energy' velocity of a radio<u>resistant</u> cell does <u>not become changed</u> by irradiation with energy at the speed of light c. [The evidence presented within <u>Supplementary 'Reference' Information</u> item 14. pages 145-147, draws attention to a 'variability' of melanoma cells that when heightened, causes <u>a level of malignancy involving 'two conditions'</u> (one radio<u>sensitive</u> and the other radio<u>resistant</u>) and which, when each condition is treated appropriately, results in the efficacious outcome illustrated on page 147.]

A highly revealing report by Jerome Burne (*referred to on pages 37 and 66*), who is one of Britain's leading medical health journalists and contributor to 'Medicine Today',

"A ray of light can kill cancer cells without leaving terrible scars – so why are so few offered it?"

was published in the U.K. 'Daily Mail' on 13th October 2009. [A matter referred to again on pages 75 and 90.]

Within the above original report, the reader will find confirmation: "despite the National Institute for Health and Care Excellence (NICE) approving the use of the PDT therapy for cancers such as skin, mouth, oesophagus, head and neck, less than 1 per cent of those who could benefit actually get it."

An "UPDATED" report has been made available since on — http://www.dailymail.co.uk/health/article-1219948/A-ray-light-kill-cancer-cells-leaving-terrible-scars--offered-it.html

Lung cancers have *also* been treated successfully in association with the **National Medical** Laser Centre, which is based at **University College London** (UCL) and **University College London Hospitals NHS Foundation Trust** (UCLH). There is greater experience of PDT associated with this hospital, than anywhere else in the United Kingdom: there are few comparable research groups anywhere in Europe or North America. [Referred to page 90.]

The medical establishment will have need of the underlying advanced nuclear medical physics presented within this White Paper. **Without such knowledge** – <u>understanding of the underlying cause and treatment of electrically abnormal pathogens</u>, <u>will continue to be stalled and result in the needless deaths of millions of patients worldwide</u>.

B. Malignant melanoma skin cancer has been demonstrated to be treated successfully on occasions by the use of radiotherapy – *X-rays are formed (of course) by electric particle field energy at the speed of light c* – this treatment should be followed by **Electron Replacement Therapy** (ERT), **to treat the 'ionization factor'** associated with the common dual condition of malignant melanoma skin cancer. [In relation to the 'acknowledged ionizing effect' of x-ray irradiation (*which results from the highly energetic frequency of this form of radiation*) it would be prudent to utilize ERT after radiotherapy and subsequent to other *all* uses of X-rays.] *This item A is referred to on page* 72.

The latter term ERT refers to the use *for treatment purposes* of a *low* frequency of electric current at *only* 500 kHz. A 'low frequency' is required, for the purpose of allowing a replacement of electrons to take place; too high a frequency causes ionization. Malignant

melanoma is a more highly developed condition than other forms of skin cancer: the success of the 'dual treatment' referred to on pages 145-147 *immediately below (associated with <u>Supplementary 'Reference' Information</u>¹⁴), indicates the pathogens can be caused by a process of electrical propagation resulting in both radio<u>sensitive</u> and radio<u>resistant</u> abnormal cells.

[ADDITIONAL INFORMATION including photographic evidence, is provided within <u>Supplementary 'Reference' Information</u>, item 14. on pages 145-147.]

C. RADIOTHERAPY (the use of x-ray irradiation at the speed of light c) is more suitable for the treatment of small tumours, than those of larger scale. **X-rays are highly energetic:** this can cause damage to healthy cells in close proximity to the tumour(s), especially during lengthy treatment by X-ray irradiation employed by radiotherapy.

SUCCESS RATES have been reported (*occasionally*) to be as high as 95 per cent, however such instances are <u>not</u> the 'norm': the profession acknowledges the 'average' success rate reflects *only* some 40 per cent of the cancer cases treated by radiotherapy.

A relatively new 'Microwave Therapy' (which is a 'main subject matter' to be presented within this Section Three) has been shown to provide an efficacious rate of success approximating to 95 per cent. This high rate of efficacy is stated to *apply even to large tumours, which the initiating Surgeon David Lloyd has confirmed, he has been able to treat "in minutes". [See the University of Leicester published report 'Life-Saving Cancer Treatment Pioneered ..." on pages 49-50.]

THE TREATMENT OF CANCER by RADIOTHERAPY is well-known to the medical profession. Little needs to be added here other than to convey – while the profession do all in their power to limit the damage to healthy cells: where the treatment of larger tumours are concerned, it has been common for radiotherapy to be curtailed prior to the completion of a sufficient period of treatment. [There will clearly be useful savings in costs to Health Services, if and when 'Microwave Therapy' is used in the place of radiotherapy.]

THE REMEDIAL EFFECT — when the electric particle 'field energy' of X-rays at the speed of light c irradiates the atoms which comprise radiosensitive cancer cells — the inflowing irradiated energy (at the speed of light c) averages its 'field energy' with the (slower moving) electric particle 'field energy' comprising the atoms of the electrically abnormal cancer cells. By this process — the electric particle 'field energy' speed of the inflowing X-rays merge with and thus elevate the slower moving electrical 'field energy' associated with the electrically abnormal pathogen cells ... until the 'average' speed of the eventually fully interrelated 'field energies' become equal to the speed of light c. [The exception being in those cases where — as stated in bold within the previous paragraph.]

The normalized data of the atoms comprising the DNA – enables the DNA to decode the construction of the cancer cell(s) as foreign, and mark the cell(s) for destruction by the immune system. Only the cells that have been irradiated have the extra surface receptors: a reality stated by Omar Eaton and his colleagues at the M.D. Anderson Cancer Centre of the University of Texas in Houston, *reported on page 68-69 of this Section Three*.

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There are two forms of cancer which radiotherapy is 'unable' to benefit remedially:

- i) Abnormal radio<u>resistant</u> cells that are **ionization-induced**, are propagated subsequent to a loss of data carried formerly by electrons associated with a *minute* number of the 'base pair' atoms of the DNA.
- ii) Abnormal cells which result from an inherited abnormal gene, are the second type of cancers which are radio<u>resistant</u> to radiotherapy and likewise to other forms of electric particle irradiation utilizing the speed of light c.

In most countries: **5 per cent or more of the primary cancers are radio**resistant: parallel evidence for which has been provided by the Biofield Diagnostic System (BDS) and Trimprob scanners. The BDS and Trimprob have been independently clinically proven to detect up to 95% of cancers: only those cancers which are radio<u>sensitive</u>, are detected by these non-invasive scanners. [Refer item 12, *pages 60-63*.]

<u>Note</u>. At the entrance to X-ray Departments in the United Kingdom, there is a sign to warn of 'Ionizing Radiation'. Within these departments and for the latter reason, the staff are provided with suitable protection.

The utilization (during radiotherapy) of x-ray irradiation, increases significantly the risk of developing ionization-induced genomic instability, when exposed to healthy cells in close proximity to a tumour under treatment. Cancers caused by ionization-induced genomic instability are radio<u>resistant</u>: such cancers are treatable by Electron Replacement Therapy (ERT) ~ i.e. the safe application of low-frequency (500 kHz) electric current. [A example of the use ERT, is provided within the Reference¹⁴ pages 145-147.]

D. FRACTIONATED STEREOTACTIC BODY RADIOSURGERY (FSBR) – may be described as a method of providing numerous 'finely contoured' electric particle 'field energy' rays in such a manner, as to enable the treatment of a radiosensitive tumour. This is a process that irradiates a high input of remedial energy at the speed of light *c* and with greater safety than would be the case in some hospitals when utilizing radiotherapy.

The treatment and remedial effect has similarities with radiotherapy: the technique has been considered an improvement on the widespread use of radiotherapy. [Published figures have claimed 90-95 per cent success rates for FSBR when treating Cancer. *Our access to information concerning FSBR is less detailed, than for other 'medical treatments' which transmit irradiation of electric particle 'field energy' at the speed of light c.*]

E. PHOTODYNAMIC THERAPY (PDT) is an appropriate means of utilizing the electric particle 'field energy' comprising light waves – these *of course* are displaced-in-time at the frequency hertz of the speed of light c. PDT utilizes wavelengths of 'light' *itself*, as a remedial treatment for some forms of Cancer that are in a position to be irradiated with light.

The National Institute for Health and Care Excellence has approved the use of PDT for cancers including skin, mouth, oesophagus, head and neck: see page 69. As a consequence

however of the lack of appropriate scientific knowledge available within the establishment – associated with the underlying cause and treatment of those cancers for which PDT is an appropriate method of treatment – has caused intense frustration among clinicians who know of the efficacy of this treatment.

[This Section Three' of the White Paper, contains suitable aspects of this Partnership's understanding of the appropriate nuclear medical physics, for which the profession has a need in association with the treatment by PDT of non-melanoma SKIN CANCERS (concerning which, the reader may refer to the' detailed' knowledge within item A. pages 66-69) – also to the reference to LUNG CANCER (suitable details are provided within item F. on pages 73-76).]

It is appropriate (and might prove helpful to some readers if) we 'summarize' here, the treatment of non-melanoma SKIN CANCERS – which 'parallels closely' the treatment of Lung Cancer detailed within item F on the following pages.

SUMMARY. In cases where radio<u>sensitive</u> non-melanoma skin cancers are concerned: a light sensitive drug (*for maximum absorption and effect*) is painted or sprayed onto the affected area, prior to light of the appropriate wavelength being irradiated onto the treated cancerous tissue.

THE REMEDIAL EFFECT. The light sensitive drug induces a significant increase in the absorption of electric particle 'field energy' carried by rays of light entering the surface of the skin.

The physical changes, which have been observed by the profession, are consequential to a remedial adjustment of the former slower than normal electric particle 'field energy' speed of the atoms which *prior to treatment* comprised the abnormal subatomic energy state of an electrically abnormal pathogen. The effect of irradiation with wavelengths of visible light (subsequent to coating the affected region of skin with a light sensitive drug) gives rise to the 'field energy' – comprising the atoms of the radiosensitive cancer cells – becoming elevated in electric particle speed to that of light c.

It may be useful to some readers, to reflect here upon the known reality which CONCERNS THE ENERGY OF LIGHT: solar panels collate electric particle energy from the rays of the sun. The Partners' *advanced* understanding of quantum physics confirms, each particle wavelength of light is formed by a fundamental gravity photon. [The reader is referred to Section Two page 23, item 3. i) and ii).] It is also well-known that physicists have described light in terms of 'sometimes a wave and sometimes a particle'. The reality may now be understood: a wavelength of light is formed by the pathway of a particle: *i.e.* a particle 'fundamental gravity photon'.

1.2349 x 10^{20} electric particle fundamental photons (each with a 'field energy' operating at the speed of light c) form collectively every single electron produced by a solar panel.

NOTE. The reader may recall that within items 1 and 2 on pages 19-21 of 'Section Two' of this White Paper, data was provided associated with the fundamental components of protons, neutrons <u>and electrons</u>. In addition, therein was contained new science published

by the Fermi National Accelerator Laboratory, Batavia, Illinois, USA: indicating the findings available at that time – which *in turn* provided useful corroborating evidence.]

It is understood: the 'FIELD ENERGY' SPEED OF LIGHT c, IS THE 'NORM' FOR ATOMS WHICH COMPRISE HEALTHY TISSUE. **Photodynamic Therapy is a successful treatment in cases where** non-melanoma **skin cancers are radiosensitive.** That is to convey: **the state of the cancer cells is that of an electrically abnormal pathogen:** *i.e.* the electrical particle 'field energy' of the atoms, is operational at <u>less</u> than the speed of light c. There is little or no scarring and no unpleasant side effects – care is however needed, for a suitable period of days after photodynamic therapy: this in order to protect the area of treated skin, which remains for a while sensitive to light. [Pages 71-73 are referred to on page 90.]

F. THE TREATMENT OF LUNG CANCER.

Dr. Jeremy George of University College London Hospital, is among those who pioneered Photodynamic Therapy (PDT) with success for to the treatment of LUNG CANCER. He has indicated that "While lung cancer is not the most common cancer in Britain, it is the most lethal, killing 35,000 each year. This is because it is often detected late, as there may be no early symptoms."

This item F, is to convey two 'examples' –

by way of a collation of knowledge applicable in two similar cases of treatment by PDT applied to lung cancers.

PDT has its limitations, in that it can only be utilized to treat cancer cells where a photosensitive drug can be exposed to an appropriate frequency of visible light. The establishment view is that PDT involves the destruction of cancer cells through the use of a fixed-frequency laser light, in combination with a photosensitizing agent such as porphyrins, which were used in the following two instances.

- a) The light sensitive drug is applied by slow intravenous injection. Two days later a camera is inserted into the lungs of the cancer patient, together with a *frequency of a suitable* blue light to detect the position of the tumour(s).
 - In the published case of Usef Hussain, who was referred to consultant Jeremy George at University College London Hospital: a "blue light" was used to "show up tumours, turning them red/mauve while surrounding healthy tissue is grey/blue. It is not clear why" [When a physician exposes the photosensitized tissue to blue light, this causes the photosensitizer to fluoresce: the red areas define the extent of the radiosensitive malignant lesion the mauve area reflects light from radioresistant tissue.]
- b) For the purpose of PDT treatment: an appropriate fixed-frequency laser light was then used in combination with the chosen photosensitizing agent. In the 1st of our two examples cases concerning Usef Hussain, the photosensitizing agent was sensitive to monochromatic **red** laser light. The tumour had been injected intravenously with a light-sensitive drug *the published 'establishment view'* continued "then exposed to red laser light that triggers a toxic chemical reaction which destroys the tumour but leaves the surrounding tissue undamaged." [Advanced nuclear physics indicates: the DNA was elevated to normal by irradiation with electric particle 'field energy' at the speed

of light c – enabling the radiosensitive cancer cells to be decoded as foreign and thus marked for destruction by the immune system.]

In the above published lung cancer case associated with University College London, fluorescent red light was reflected *back* by radio<u>sensitive</u> tumours of the lungs. There is more than can be conveyed and now follows –

Observations by the author of this White Paper in the blue typeface, are from an understanding of nuclear medical physics beyond the Standard Model.

At www.photobiology.info/Berg.html photosensitizers in Medicine, Kristian Berg, Department of Radiation Biology, the Norwegian Radium Hospital — on page 1, there are two colour photographs. The photograph on the left, is that of a basal cell carcinoma. The picture on the right is seen using a blue light, subsequent to the patient receiving an injection with a light-sensitive drug. **Only the radiosensitive tumour cells fluoresced** in pink/red. In the case of Usef Hussain the fluorescent colour was red. **Why do cancer cells fluoresce in this way?**

Epidemiologist and radiation-induced genomic instability specialist Dr. H. Rosalie Bertell PhD., advised the author of this White Paper during 2011, research scientists in the USA had raised a similar question: however they had not been in a position to take into account the following reality. Radiosensitive tissue is formed by atoms that operate electrically with a 'field energy' speed which is less than that of the normal speed of light c. Because the electric particle 'field energy' of radiosensitive cancer cells is out-of-sync with the electromagnetic spectrum, the frequency of light emitted by the radiosensitive cells display an 'abnormal characteristic' by way of:

- (i) The radio<u>sensitive</u> emission of electric particle 'field energy' will take the form of a longer wavelength (and thereby a lower frequency) within the region of the visible light spectrum.
- (ii) This will be observed by the physician as a change in the 'fluorescent colour' emitted by the radiosensitive tumour(s) and triggered by a lower frequency of light colouration. The change in coloration will continue to be apparent while remaining under the influence of the 'photosensitive to light agent' introduced prior to the treatment.
- c) Photodynamic Therapy (PDT) for lung cancer, takes 30 minutes or more under general anaesthetic. The doctor will use a bronchoscope with a tiny camera attached, through which the clinician will slide a thin flexible cable an optical fibre which is to carry a suitable level of light to irradiate *each* tumour for 10 to 15 minutes. The treatment time in the published case of Usef Hussain, was reported to be carried out successfully over a period of 45 minutes the patient was allowed home the next day. The article indicated also, that the patient had remained clear of lung cancer since his treatment. [The article concerning Usef Hussain, appeared in "GoodHealth" by Martyne Halle, Daily Mail, August 23, 2005.]

[Notes. The profession recognize three 'types of lung cancers': about 85 per cent are 'non-small cell' / about 10-15 per cent are 'small cell' / very little is known concerning the cause of the few remaining 'carcinoid lung tumours'. Inherited or acquired gene changes are the cause of some lung cancers: 'inherited' cancer cells are radio<u>resistant</u> and are expected to fluoresce mauve or purple; whereas 'acquired' gene changes are likely to prove radiosensitive and fluoresce within the red spectrum of light frequencies.]

A published remedial success rate for those simply referred to as early lung cancers, has been 70 per cent. [In the light of the enlargement of knowledge provided within this White Paper, it is thought the efficacious rates of success associated with the treatment of lung cancer may yet be improved further. An exchange of information between those

utilizing PDT for lung cancer and the author of this White Paper, would prove beneficial to members of the medical profession and thereby patients.]

The 2nd of 'our 'two example cases' refers to the PDT case of Dan Moulden, who was also the patient of consultant Jeremy George at University College London Hospital. In this case, the patient's left lung had been removed by surgery, six years earlier. Informed about a trial for early lung cancer patients, Dan Moulden was advised of the need for an intravenous injection of a light-sensitive agent, prior to a procedure similar to that which applied to our '1st' example *concerning which you have read information within item* (b) and also in the first paragraph of this item (c).

Details of this 2nd of the 'two examples cases', can be found within the following Internet website > 'Me and my operation: The beam of ;light that can kill lung' www.dailymail.co.uk/.../Me-operation-The beam-light-kill-lung-cancer-...< Within the latter information, Dr. Jeremy George (*Consultant in Respiratory Medicine*) University College Hospital London, provides the knowledge available to him: which reflects upon both of the 'two example cases' indicated herein within items (b) and (c). [The nuclear medical physics presented within this White Paper – provides the medical profession with a more advanced understanding, than previously has been made available through establishment channels.]

Bearing in mind the independent knowledge contained within the 'original' published article on page 69, also within the 'updated' website – one aspect of which indicated, that although the National Institute for Health and Care Excellence (NICE) had approved PDT treatments. "Just 300 cancer patients out of more than 300,000 were treated last year. Many are never even told about it or they are told (incorrectly) that it is experimental and doesn't work." – it may be apparent to readers of this White Paper, that there is not only a problem of communication within the medical profession which is costing many lives, but also the establishment have also a need to consider their lack of knowledge on the subject matter, which handled differently could have been made available within the profession. Suitable information concerning the latter position has of necessity been detailed within 'Section One' of this White Paper.

d) **Lung cancer is the most common cancer worldwide**: a published figure for deaths worldwide is available for the year of 2008, when 1.38 million patients lost their lives to this cancer type (*reflecting 18.2% of the total deaths from cancer for that year*). 160,340 Americans were predicted to die from lung cancer during 2012: a figure estimated to reflect approximately 28% of all cancer deaths in the region.

Electric particle 'field energy' at the speed of light c is inherent in light waves, and can be used ($via\ PDT$) to treat with success radiosensitive tumours within the lungs.

The profession having observed certain symptoms while PDT is taking place, have assumed *understandably* those symptoms account for the death of the cancer cells. **The reality at subatomic level** is that - *subsequent to the abnormal electric particle* 'field energy' of the radio<u>sensitive</u> atoms having been elevated by PDT to the normal speed of light c — the normalized DNA has been enabled to decode the data

associated with the 'original structure' of the cells as 'foreign', and thereby mark the abnormal radiosensitive cells for destruction by the immune system.

A Summary of THE SUBATOMIC MECHANISM follows.

RADIOSENSITIVE CANCER CELLS are formed by atoms comprised of electric particle 'field energy' operating with a 'field energy' speed that is **less** than the speed of light c. Subsequent to the sensitization of the lung cancer cells to the electric particle 'field energy' carried by photons forming wavelengths of light, by insertion into the patient's arm a 'slow intravenous injection' of a light sensitive drug: this is followed 'two days later', by irradiation of the lung cancer cells with a suitable wavelength of visible light. The slower moving electric particle 'field energy' of the atoms which form the radiosensitive cells, becomes in this way elevated in 'field energy' speed towards the normal electric particle 'field energy' speed of visible light c.

When the electric particle 'field energy' of the base pair atoms (that comprise the DNA of each of the radiosensitive cancer cells) have been elevated to the normal 'field energy' speed of the electromagnetic spectrum, the normalized DNA is thus enabled:

- (i) To decode the data associated with the original structure of the cell.
- (ii) Recognize the cell as 'foreign'.
- (iii) Mark the cell for destruction by the immune system.

An observed reality. A radiosensitive lung tumour that has been light-sensitized, absorbs and reflects back at a *slightly* lower frequency of photons, the electric particle 'field energy' of the original blue wavelength of light (*that was utilized by the doctor to scan THE LUNGS*) and which now carries the *slower* 'field energy' speed comprising the wavelengths of light associated with the red spectrum. This knowledge provides evidence which *together with other known physics* corroborates the following to be true.

RADIOSENSITIVE CANCERS reflect a condition where the electric particle 'field energy' of the atoms comprising the tumour, operate at a speed which is **less** than the normal speed of light c. The 'normal' velocity of light c is the 'field energy' speed shared by all of the frequencies of the electromagnetic spectrum: with the exception of gamma rays, which are now understood to operate at a speed which by the most ultra-minuscule of margins is radioactive and thereby less than c. - (Refer item 23. pages 150-51).

Dr. Jeremy George has indicated, PDT has a significant potential. "Other consultants have used it very successfully on a variety of cancers, but photodynamic therapy will not take off in the UK without support from the Department of Health and organizations like the Medical Research Council." [With acknowledgement to the *United Kingdom* 'Daily Mail' | 23.8.2005 | page 40. >>> See also Supplementary 'Reference' Information 16. on page 148.] Note. The foregoing item F, was referred to on page 73, and the lung cancer aspect is also referred to on page 90.

Given the foregoing verifiable Medical Examples -

associated with 'different methods' of applying electric particle 'field energy' at the speed of light c by way of appropriate treatments for radiosensitive cancers –

THIS WHITE PAPER MOVES ON NOW TO ITS 'MAIN THEME':

a medical treatment which *alongside PDT* has the dual potential to be able to treat more than 6 million cancer patients p.a. worldwide.

The presentation of 'MICROWAVE THERAPY':
A HIGHLY SUCCESSFUL TREATMENT OF RADIOSENSITIVE CANCERS.

This Partnership has no vested interest in the medical equipment, the manufacturer, or any associated personnel.

We are strictly non-profit-making.

The 'Press Release' shown herein on pages 49-50 conveys:

"Seven years ago, Mr David Lloyd, consultant liver surgeon at the *LRI and clinical tutor in surgery at the University of Leicester medical school, came up with the idea of placing a tiny probe into liver tumours to blast them with microwaves. University of Leicester medical students have also worked on the research." [*LRI: Leicester Royal Infirmary.]

"To date, almost 100 patients diagnosed with inoperable liver cancer (terminal cancer) have been treated with the technique and in 95% of these patients the cancer disappeared."

'MICROWAVE THERAPY'

is a relatively new UK treatment for inoperable liver cancers, which provided the above success rate during a medical trial involving more than two hundred tumours.

The treatment was conceived by -

Consultant Liver Surgeon David Lloyd MBBS. FRCS(Engl). MD.

Honorary Senior Lecturer in Cancer Studies, University of Leicester.
Consultant Hepatobiliary and Laparoscopic Surgeon.
Leicester Royal Infirmary,
Leicester LE1 5WW,
United Kingdom.

RESEARCH was contributed by Bath and Leicester Universities.
THE ASSOCIATED MEDICAL EQUIPMENT is manufactured by Acculis Ltd.
THE AUTHORITATIVE 'WHITE PAPER' in the hands of the reader, provides the essential *independent* fundamental science. We refer to a significant advance in nuclear physics – which describes the underlying cause of *all* cancers, and highlights *also* the viable treatment for most of these.

CORROBORATED SCIENTIFIC KNOWLEDGE is the need we seek to provide, in order to enable 'Microwave Therapy for the Treatment of Cancer' (MTTC) to be understood and accepted at those advanced levels which, this White Paper will indicate and confirm, the

MTTC medical treatment deserves.

An appropriate use of microwave electric particle 'field energy' can be applied to radio<u>sensitive</u> cancers, where it is practical for a thin probe to be inserted into each tumour needing treatment – *excluding (without exception) treatment of the head.

[*The upper 'safe limit' when electrical treatment is applied to brain tumours, is considered to be 39.2°C. Suitable reference may be made to Servicio de Neurocirugia, HUGTP, Badalona, Barcelona, Spain. Correspondence: DR. Adolfo Ley Valle, c/Muntaner 318 pral. 1^a. (08021) Barcelona, Spain.] [Further reference on page 97.]

The MTTC method referred to here, provided a 95 per cent success rate when utilized for the remedial treatment of *previously considered* inoperable liver cancers – during a medical trial involving nearly 100 patients and 200 tumours. The latter proved to be an appropriate test of the 'potential', which is presently under review within this White Paper.

Robert Wood-Smith – Consultant in Radiation-induced Genomic Instability & Authoritative Adviser in Advanced Nuclear Medical Physics – *principal author of this White Paper*'– estimates in the region of 80 per cent or more of the 8,000,000 patients worldwide who 'presently' die annually from Cancer may be treated with Microwave Therapy, or Photodynamic Therapy where the latter would be more appropriate.

Similar 'nuclear medical physics' is to be shown to apply to the underlying cause and treatment of a number of serious health problems, including 'drug and antibiotic resistance'.

BACKGROUND INFORMATION follows.

In 2002: hepatocellular carcinoma was prevalent in the Far East, due to a high incidence of hepatitis infection. A new microwave treatment was at the time undergoing a trial at Leicester Royal Infirmary in the UK. Subsequent to presentations to the Malaysian Minister of Health and Prime Minister in May 2002, trials of a new treatment for primary liver cancer were given the go ahead in Malaysia, *supported by the Prime Minister Mahathir*. The development to be carried out by the Medical Physics and Acoustic Sensing Group, Department of Physics, University of Bath.

2006. University Hospitals of Leicester 'Press Release' 28.06.2006, drew attention to the following information. Cancer patients who had been diagnosed by doctors to have only weeks to live, were reported alive several years after a new treatment developed by Leicester Royal Infirmary (LRI). Seven years earlier, Consultant Liver Surgeon David Lloyd had perceived the need to research the placement of a probe inside liver tumours, and thereby to irradiate the cancer with microwave energy from the inside of the tumour.

Surgeon David Lloyd is quoted stating: "Thousand of patients die each year from the effects of liver cancer, either because the disease is unresectable (cannot be removed surgically) or it does not respond to chemotherapy." He said of the microwave equipment: "it can treat very large tumours within a few minutes." Adding, he had "treated nearly 100 patients and over 200 cancers." The Surgeon indicated, "The microwave device is extremely safe, very effective and easy to use". His view of the potential – this form of

remedial treatment "is proving to be a significant advance in the treatment of liver cancer." Surgeon David Lloyd has in the past been invited to address a number of international meetings on the subject of the new treatment.

The viewpoint and experience of a female patient who received the above treatment was quoted as follows: "When I was first diagnosed with liver cancer, I contacted the Mayo Clinic in America for advice ... the doctors told me my tumours were untreatable. They gave me a maximum of six months to live. I then found out about Mr. Lloyd's unique microwave treatment probe, and I am now alive and well – fours years after being diagnosed with cancer."

In June 2008: Surgeon David Lloyd's Chief Executive conveyed to him an earlier report by the Partnership responsible for this White Paper – headed 'Medical Science is in Crisis, Worldwide'. The latter document contained a reference by the author of this White Paper to the 'potential' of the aforementioned new microwave treatment. Robert Wood-Smith received an invitation from David Lloyd to arrange a meeting, which took place subsequently on the 26th June 2008.

ON THE SAME DAY THE ABOVE INVITATION WAS RECEIVED – **Robert Wood-Smith** (RWS), **Consultant and Authoritative Adviser in Radiation-induced Genomic Instability**, received a letter dated 3rd June 2008 from Geoff L. Ridgway MD, BSc, FRCP, FRCPath, Senior Medical Officer, Infection Control & Blood Policy, Department of Health, London, U.K., *on behalf of Sir Liam Donaldson, the Chief Medical Officer*. The letter contained a request for RWS to prepare "further details of the Leicester University study" referred to within the document named within the previous paragraph. **During the first meeting between Surgeon David Lloyd and RWS on the 26th June, it was agreed RWS would:-**

- (a) Prepare the 'draft' of an appropriate report.
- (b) Seek additional information and views from David Lloyd, prior to -
- (c) Presentation of the report invited by the Senior Medical Officer *on behalf of* the Chief Medical Officer for the Department of Health, England.
- (d) Surgeon David Lloyd and RWS met again, on 9th October, 2008.

There remain certain anomalies within the understanding by the profession of liver cancer, which are in need of clarification and investigation. Such an investigation can be furthered, by drawing upon the latest advance in nuclear medical physics – which this Partnership is in the process of making available to the profession within this White Paper.

T. H. Huxley described 'science' in terms of "truth and objectivity".

The medical profession need to look at the underlying 'cause', instead of concentrating on the 'symptoms of the disease' we know as Cancer.

The cause of Cancer is to be found within the subatomic structure of the 'abnormal' cells that comprise cancerous tissue.

In reality and in order to treat the underlying cause, there are *only* two categories of cancer.

1. Radio<u>sensitive</u>: up to 95 per cent of primary cancers are radiosensitive.

[The pathogens of certain other diseases, *also* come within this category.]

2. Radioresistant: 5 per cent or more cancers are within this category.

Abnormal radio<u>resistant</u> cells take either of two forms: ionization-induced, or resulting from the presence of an inherited gene. [Further information is conveyed within item (b) on page 82.]

The electric particle contents of atoms which comprise radio<u>sensitive</u> cancers are (as the term may now be seen to imply) <u>sensitive</u> to irradiation with electrical particle 'field energy' at the speed of light c.

The latter term 'c' indicates the speed of light within a vacuum, which is 299,792,458 metres per second: this is the common speed associated with the varying frequencies which comprise the electromagnetic spectrum – with the exception of *gamma particles that have been observed by astrophysicists in recent times, to move (by an ultra-minuscule margin) at less than the speed of light c - (Refer item 23. pages 150-51). Electric particle 'field energy' associated with atoms, moves back-and-forth within a standing wave.

This White Paper continues with – THREE IMPORTANT MATTERS OF NOTE.

(a) Astrophysicists have learned in the recent past – wavelengths of 'gamma' radiation from a highly distant source, have been recorded to arrive here on Earth within a *very* slightly longer period of time than taken by *wavelengths of 'light' from the same source. From which the conclusion can be drawn: gamma rays travel at a speed which is so close to the speed of light, that only over a distance of billions of light years can scientists detect a difference in velocity with the speed of light *c*.

Scientists understand, there are three types of nuclear radioactive particles: alpha, beta, and gamma. 'Radioactivity is a term' which has been applied by science, to an 'abnormal' electric particle energy: the characteristic of which is a 'field energy' speed that is slower moving than the speed of light c – including slower even by the most minuscule margin.

[Alpha particles travel at in the region of 6% of the speed of light c. Beta particles move mostly at 99% of c: occasionally less than this. The speed of gamma ray particles is so close to that of light, scientists can be forgiven for the 'mistaken belief' that gamma ray particles travel at c: gamma rays would not be radioactive, if their speed was that of the speed of light c.]

With respect, it would be suitably correct for the ELECTROMAGNETIC SPECTRUM to be amended to comprise *only* those frequencies of electric particle energy, which travel at the speed of light c. [Radioactive gamma rays should be excluded from the electromagnetic spectrum, as indeed are alpha and beta particles - (refer please to item 23. pages 150-51).]

IT IS VITALLY IMPORTANT FOR MEDICAL RESEARCHERS TO UNDERSTAND: radioactive electric particle 'field energy is an electric particle 'field energy' which is out-of sync with the electromagnetic spectrum.

Subsequent to the base pair atoms which comprise DNA or RNA becoming exposed to

(usually) low-level radioactivity within the natural environment (over a period of time): the data carried by these base pairs will suffer distortion. That is to convey, their electric particle 'state' will become 'out-of-sync' with the electromagnetic spectrum. Note: the latter abnormal 'electric particle state' is consequential to the otherwise 'natural protection' of the atoms which comprise the base pairs, being impaired over a period of time by carcinogens and/or more commonly the 'collective' effect of lesser toxic chemicals.

The above can result from *even* 'a minute lowering' of the subatomic electromagnetic speed, associated with atoms comprising the base pairs of the DNA or RNA. The latter abnormal 'electric particle state' creates a critical adjustment: a distortion of the displacement-in-time of the subatomic data.

'A Factor of Light' Section Two on pages 30-37

introduced the nuclear physics which suitably confirmed –

a critical factor associated with the electric particle 'field energy which comprises matter – is undoubtedly that the 'operational speed of light c' appertaining to the 'field energy' of atoms and their subatomic structure, has to be maintained at c. In the event of the 'field energy' of atoms comprising matter forming a galaxy exceeding (even minutely) the 'upper universal limit' for the speed of light c – the galaxy concerned would no longer be displaced within the time-frame of the universe. Corroborating independent evidence, consequential to the research of an international team of astronomers, was published in the journal 'Astronomy Now' September 1996. Refer to pages 30-31 for suitable confirmation.

The above knowledge directed the diligent attention of RWS to the 'parallel position' – where matter is operating at \underline{less} than the speed of light c. From a medical standpoint, the distortion thus caused to the displacement-in-time of the data associated with the atoms which comprise living tissue, would result in a significant distortion of the data being transmitted between different components of the living tissue.

Accordingly:

- (i) **The outcome of the above 'distortion'** would be manifest in 'symptoms': health conditions which do <u>not</u> reflect the underlying cause.
- (ii) Furthermore, because such health manifestations in the form of 'symptoms' are not causal, but reflect the consequence of the distortion of DNA and/or RNA data which has taken place the 'symptoms' concerned need to be understood to be health conditions which cannot *effectively* be treated remedially with drugs.
- (iii) The reason for the latter resistance is because the atoms comprising drugs, are energized electrically (at subatomic levels) at the normal speed of light c. Whereas the electric particle 'state' which applies to an electrically abnormal radiosensitive pathogen, is that of an 'abnormal subatomic electric particle condition' wherein drugs (operating as they do, at the speed of light c) cannot interrelate effectively with an 'electrically abnormal pathogen' cell, protein, bacteria, virus or gene in cases where the subatomic nuclear composition of the tissue is operating at a slower (radiosensitive) electric particle 'field energy' speed. This health condition is referred to by the profession, as 'resistance'.

- **Conversely, when irradiating radio**resistant cancers with normal electric particle **'field energy' at the speed of light c,** indeed as the term 'resistant' implies the subatomic components are naturally resistant to the underlying speed characteristic of the electrical state of the atoms comprising a radioresistant pathogen. Radioresistant cancers are already formed by electric particle 'field energy' operating at the speed of light c: to irradiate them with 'field energy' at the speed of light c, would only be to irradiate like with like.
- (c) Microwave energy when irradiated upon living tissue at a sufficiently high wattage, is able to burn radio<u>resistant</u> cells including those cells which are healthy (and therefore also radio<u>resistant</u>) situated within a close proximity to the radio<u>sensitive</u> cancer cells receiving 'Microwave Treatment'. When radio<u>sensitive</u> cancer cells have been elevated to the normal speed of light c by an appropriate treatment with 'Microwave Therapy', the DNA will mark these cells for destruction by the immune system. The latter dead cells could also then be destroyed by the above temperature be it our preference would be, that the former radio<u>sensitive</u> dead cells should be otherwise disposed of by the body's natural process.

<u>Suitably detailed information</u> – from Surgeon David Lloyd,

also Consultant Robert Wood-Smith *author of this White Paper* – is to be provided in an appropriate context, within later pages of this Section Three.

THE CONTENTS OF THIS PAPER 'FORWARD' FROM THIS POINT – PROVIDES TWO FUNCTIONS:

ONE: to evaluate, explain and confirm – a scientific and medical understanding of the Microwave Therapy treatment introduced in the United Kingdom by Surgeon David Lloyd of Leicester Royal Infirmary.

TWO: to widen the knowledge available to those whose interest it is, to consider and implement *on behalf of the profession and patients* the eventual widespread use of microwave equipment for the treatment of cancer.

When diagnosing for example a liver cancer,

an initial *ideal* need is to ascertain which electric particle category the cancer is to be identified with? Thereby **what is the underlying 'electrical state' of the liver cancer:**

is the tissue radiosensitive or radioresistant?

CONSIDERATION IS GIVEN usually reflecting the terms of reference summarised on pages 51-52 under the heading 'IT IS THE UNDERSTANDING OF THE PROFESSION'. There is also the issue of the cancer being primary or secondary: the implications thereof require to be considered further by the profession. Present medical understandings are acknowledged to be insufficient to treat, with appropriate knowledge, in the region of eight million 'cancer patients' worldwide per annum. These are patients who - as a consequence of the profession's presently incomplete understanding of cancer, its underlying cause and

treatment – lose their lives to this disease each year. From the latter statistic one may recognize, the knowledge available is less than sufficient to meet all of the needs arising. A more effective way forward would be to ascertain the electric particle energy characteristic of the malignant cells, at the subatomic level that identifies the cancer is radiosensitive or radioresistant.

A) The most advanced non-invasive scanner is the Trimprob.

The Trimprob can detect a variation in electromagnetic wavelengths between healthy tissue and radiosensitive cancerous cells. Using a beam of microwaves that varies between 400 and 1350 megahertz, when the electromagnetic signal comes into contact with biological tissue, it causes the cells to resonate at certain frequencies. Radiosensitive tumours generate a strong interference at around only 400 megahertz: healthy tissue also abnormal radioresistant cells, resonate with a frequency in the region of 1350 megahertz. The 'Trimprob' equipment displays the appropriate readings on a monitor screen.

On 12th June 2003 it was that a new handheld scanner had been introduced and was under trial by the San Carlo Borromeo Hospital, and the European Institute of Oncology, Milan, Italy.

THE MECHANISM:

- (i) The Trimprob scanner is designed to indicate the resonation of healthy tissue at a frequency in the region of a 1350 megahertz. [It is important to understand that both **healthy tissue** (which is always radio<u>resistant</u>) and abnormal radio<u>resistant</u> cancer cells, are not distinguished individually by the Trimprob scanner when the equipment shows tissue resonating with a frequency in the region of 1350 megahertz. The scanner is **not** therefore in a position to indicate the difference between healthy tissue and the <u>minority</u> of cancers which are radio<u>resistant</u>.]
- (ii) IMPORTANT: tissue formed by cells detected by the Trimprob scanner to be resonating at a frequency which is <u>less</u> than 1350 megahertz, will comprise of atoms which have an electric particle 'field energy' speed that is <u>less</u> than that of light c. All radiosensitive cancer cells which operate with an electric particle 'field energy' speed that is less than that of light c, will be detected by their resonation with a frequency in the region of 400 megahertz. Up to 95% of tumours have such a frequency hertz.
- (iii) A radio<u>sensitive</u> particle of electrical energy (*i.e.* a fundamental photon within a radioactivity-induced cell) travels a pathway between the commencement and conclusion of each frequency cycle (wavelength). The slower movement (within each standing wave) associated with the particle 'field energy' of the electrically abnormal radios<u>ensitive</u> pathogen cell, is bound to displace additional time when completing each frequency cycle; than would be the case if the 'field energy' speed was that of light c. For this reason a lower frequency hertz reading will be detected and displayed by the Trimprob, when a cancer cell is detected that is radiosensitive.

[To summarize: radio<u>sensitive</u> tumours are indicated as such by the Trimprob scanner, when resonating interference with a frequency in the region of 400 megahertz — *compared with 1350 for a healthy or radio<u>resistant</u> cancer cell.* Up to 95% per primary cancer cells are radiosensitive.]

The modus operandi and consequential confirmations associated with the Trimprob scanner, validates a key factor in the 'new scientific knowledge' presented to the medical profession by this Partnership within this White Paper. [May we add: we have no vested interest in the Trimprob scanner, or any other medical equipment.]

B) There will be cases where a hospital or clinic will (it is hoped in the near future) be able to treat a range of cancers utilizing radiotherapy, photodynamic therapy, or microwave therapy: three different methods of irradiating tissue at the speed of light c. In addition in due course – a 'whole body' electrical treatment (to be described later in this White Paper) for a number of vital specific needs.

Surgeon David Lloyd's experience with the 'microwave' method of treatment in the United Kingdom — was shown to reflect (during a trial involving more than two hundred tumours considered formerly to be untreatable) an efficacious result for 95 per cent of the nearly one hundred patients concerned. That is to convey — because the atoms comprising these tumours were energized by electric particle 'field energy' operating at \underline{less} than the speed of light c: an appropriate treatment with a microwave frequency of electric particle 'field energy' at the speed of light c, proved remedial.

The balance of 5 per cent of the tumours, proved to be radioresistant — i.e. the electric particle 'field energy' comprising 5 per cent of the tumours, were already energized with electric particle 'field energy' at the speed of light *c* and thereby, could not respond to a like-with-like treatment utilizing electric particle energy at the speed of light *c*. The radioresistant characteristic in these 5 per cent of cases, indicates these tumours were either ionization-induced or resulted from an inherited abnormal gene: neither of which can respond to an appropriate treatment for radiorensitive tumours.

Information concerning the MICROWAVE MEDICAL EQUIPMENT.

The frequency of electric particle 'field energy' operating within the Microwave Therapy 'Sulis V^{pMTA} Control Unit' utilized by Surgeon David Lloyd, is 2.45 GHz.

WITH WISDOM:

a) The Sulis V^{pMTA} Control Unit (Accu5i Applicator) utilizes an optimum of 2.45 GHz at 100 watts and is *thereby* significantly <u>less energetic</u> than the utilization of X-rays employed by radiotherapy. [By way of comparison – X-rays are acknowledged to be a high frequency 'ionizing' radiation and cancer-inducing. For the latter reason: staff when operating equipment irradiating X-rays, need to be protected from the risk of ionization of their *otherwise* healthy human tissue.]

The minimal level of ionization incurred from the frequency of the microwave medical equipment under review, will prove to be of low concern.

- b) **The wattage** associated with the heat factor of a domestic *kitchen* microwave oven, is commonly between 600 and 1000 watts. For medical purposes the 'Sulis V' equipment uses a much reduced wattage, adjustable from 30-100W. This has the effect of reducing significantly the heat factor, which could *otherwise* damage healthy cells within the close proximity of a tumour when irradiated by the microwave equipment.
- c) The microwave treatment should NOT be used for the treatment of a brain tumour. The recommended <u>temperature limit</u> when treating a brain tumour, is 39.2°C.

There has existed a school of thought which – in the absence of an appropriate knowledge of fundamental nuclear medical physics contained within this White Paper – came to the mistaken conclusion at an earlier time, the success of this microwave therapy treatment was a consequence of the heat generated. We invite the reader to consider certain additional knowledge available to the author of this White Paper.

A. When in discussion several years ago with **the Chief Executive for a cancer research organization known and respected across the world:** the Director spoke to the author of this White Paper with an awareness from their research, that heat *of itself* does not kill cancer cells.

This Partnership would refine the latter statement, as follows. Heat is not of itself the cause of the death of radiosensitive cancer cells – during the creation of a level of heat by the use of electrical 'field energy' at the speed of light c – a sufficient level of electric particle energy when applied appropriately to radiosensitive cancer cells, will normalize these cells – by elevating the electric particle state of the cells to that of the speed of light c – enabling the DNA to read the cancer cells as foreign, and thus mark them for destruction by the immune system.

- B. RADIORESISTANCE IMPLIES any of the following descriptions:
 - (i) A NORMAL cell, protein bacterium, or virus. Or –
 - (ii) A PATHOGEN cell, protein, bacterium or virus which, when induced by ionization or an inherited abnormal gene possesses subatomic data that is **unlike** the 'normal' healthy cell *referred to above in (i)*, which is also characterized by electric particle 'field energy' at the speed of light *c*.
 - (iii) THE ATOMS which form a RADIORESISTANT cell, protein bacterium, or virus comprise of electric particle 'field energy' operating at the speed of light *c*.

RADIOSENSITIVITY IMPLIES:

(i) An ELECTRICALLY ABNORMAL PATHOGEN cell, protein, bacterium, virus or gene – is formed by atoms comprised of electric particle 'field energy' which

- is operating at \underline{less} than the speed of light c and therefore such pathogens are out-of-sync with the natural *underlying characteristic* of the electromagnetic spectrum.
- (ii) ELECTRICALLY ABNORMAL PATHOGENS are sensitive *and therefore will* respond to electric particle 'field energy' at the speed of light c providing that electric particle 'field energy' at the speed of light c is suitably applied to the electrically abnormal radiosensitive pathogen only then will such a treatment prove remedial.
- C. The above terms will be useful when seeking to understand the implications presented by **independent expert knowledge in the field of 'heat injury**', which indicates a temperature exceeding 60°C will kill 'normal' healthy tissue. A report from **Stanford University published by the American Physical Society 24 July 2006,** referred to mammalian cells being able to survive at temperatures of 42 °C to 47°C for prolonged periods of time. In addition, cells die within a few seconds at a temperature approximating to 70°C. [*The Stanford report*: DOI: 10.1103/PhysRevE. 74.011915].
- D. TO SUMMARISE AND EXAMINE FURTHER.
 - (i) 'Healthy' cells are able to survive at 42 47 °C for prolonged periods of time.
 - (ii) At temperatures of 60-69°C, the cells comprising normal 'healthy' tissue will die. Such cells die within a few seconds when the temperature reaches in the region of 70°C and above.
 - (iv) **Surgeon David Lloyd has confirmed**: 5 per cent of the 'cancer' cells he treated with microwave therapy (electric particle 'field energy' at the speed of light c) within the University of Leicester medical trial, were **not** killed. Appropriate nuclear medical physics indicates, the latterly referred to 5 per cent of cancer cells would certainly have been either radioresistant ionization-induced, or resulting from a radioresistant abnormal gene.
 - (iv) The reader is invited to refer to matters within item 'A' on page 85. There can be no doubt that radio<u>resistant</u> cancer cells differ from radio<u>resistant</u> 'healthy' tissue. The radio**sensitive** cells (in the case of those treated successfully within the University of Leicester medical trial) had been normalized, by elevating the electric particle state of the cells to that of the speed of light c—enabling the DNA to read the radio<u>sensitive</u> cancer cells as foreign, and thus mark them for destruction by the immune system.
 - a. However the controls of the microwave medical equipment used to treat the above cancer cells, were set to enable the temperature to continue to rise up to 60°C (the latter temperature is known to be sufficient to kill cells forming 'normal' tissue). Due to this position having been reached: the former radiosensitive cancer cells (then normalised in their energy terms, and now dead) were observed to have been burned resulting in

the conclusion by the medical operatives at the time, the means of treatment amounted to one of "burning the cancer cells".

- b. If that was the case: the remaining 5% of the cancer patients' cells would have *also* been burned. Of the patients treated during the trial, in 5% of cases, the treatment failed. It failed to 'burn' the cancer cells because *at subatomic level*, 5% were different from that were radio<u>sensitive</u> and treated successfully.
- (v) Those cancer cells that were radioresistant cells (when treated with the same electric particle 'field energy' at the speed of light c) remained unchanged: however the characteristic of these cells 'differed' from healthy tissue and for this reason, did not respond in the same way as the radiosensitive cells had done.

[Note. Ionization-induced radio<u>resistant</u> cells have lost some electrons: a state which influences the normal carriage of data at light c.]

(vi) The reader will be informed at a suitable later stage in this White Paper, Surgeon David Lloyd utilized temperatures up to 60°C. The radio<u>resistant</u> cancers were included at the latter temperature and thereby it can be understood – the 5 per cent of cancers cells which were not destroyed at 60°C, were *electrically* different: that is either radio<u>resistant</u> and ionization-induced – or radio<u>resistant</u> and induced by an abnormal gene.

An ELECTRICALLY ABNORMAL RADIOSENSITIVE PATHOGEN cell, protein, bacterium, or virus, will comprise of fundamental photons operating with a 'field energy' speed which is <u>less</u> than the speed of light *c*. **Radio**sensitive **pathogens are known to succumb at the lower temperatures we indicate** below and on page 88.

DR. S. JANES, CLINICAL CANCER SPECIALIST AT UNIVERSITY COLLEGE LONDON, has stated – cancer cells when heated to 43°C start to die. [The treatment is known to the establishment as hyperthermia therapy: the energy source is a series of electromagnetic pulses at the speed of light c.] [Please refer to item 24. upon pages 151-152.]

A report © 2011 THE AMERICAN CHEMICAL SOCIETY August 11, 2011: claimed that magnetic nanoparticle heaters can kill cancer cells once the temperature has exceeded 43°C.] [Reference may be made *also* to item 24. upon pages 151-152.]

- (i) In the United States, up to 95 per cent of primary cancers are radio<u>sensitive</u>.
- (ii) Magnetism, electromagnetism, and gravity, are interrelated matter is comprised at fundamental level of gravity photons *please refer to the* independent scientific evidence on pages 19-21.
- (iii) Metal nanoparticles generate heat in the presence of levels of electromagnetic radiation *the electromagnetic 'field energy' speed, is that of light c*.

A medical organization on the North American continent when reporting on their use of medical equipment applying electric current at 500 kHz (at the speed of light c) to radio<u>sensitive</u> cancers', indicated that at 39°C the growth of cancer cells was slowed down, and at 41-43°C the cancer cells died – subsequently, the latter figure was revised to 41-45°C.

The NATIONAL CANCER INSTITUTE at the National Institutes of Health – http://www.cancer.gov/cancertopics/factsheet/Therapy/hyperthermia in a review dated 31st August 2011 indicated: that high temperature hyperthermia has been successful in the treatment of (*most but *not all*) cancer cells, utilizing temperatures up to 113°F (45°C). [*This would not include 5% or more abnormal radioresistant ionization-induced or abnormal inherited gene cancer cells.] [Refer item 24. pages 151-152.]

HYPERTHERMIA IS INDUCED COMMONLY INTO HUMAN SUBJECTS, by the use of electric particle 'field energy' at the speed of light c: this can be achieved by a suitable frequency of:

- (a) Electric current
- (b) Microwave electric particle 'field energy'
- (c) Radiofrequency ablation.

[The report by the National Cancer Institute draws attention to various techniques including the use of microwaves and radiofrequency.]

A consensus of INDEPENDENT MEDICAL EXPERIENCE CONFIRMS that a temperature of 43-45°C is associated with the death of cancer cells. Advanced knowledge in the field of nuclear medical physics, supported by independent evidence contained within this White Paper – indicates this statement applies *only* to suitably irradiated radiosensitive cancer cells. [Summarized within item 24. upon pages 151-152.]

THE ABOVE TEMPERATURE should indicate to a Surgeon or Treatment Operative – that a **necessarily satisfactory level of saturation** and therefore **integration** of the healthy inflowing electric particle 'field energy' at the speed of light c **is taking place between** —

- (i) the abnormal slower moving electric particle 'field energy' speed of atoms comprising the radiosensitive cancer cells, and
- (ii) the inflowing electric, microwave, or radiofrequency *electric* particle 'field energy' which is operating at the desired speed of light *c*.

Heat results from vibration of atoms: a sufficient heat confirms that a suitable level of saturation has been reached. The significant advance which has been made in NUCLEAR MEDICAL PHYSICS confirms beyond doubt, that heat *of itself* is **not** the underlying cause of the death of electrically abnormal pathogen cells, proteins, bacteria, or viruses.

The foregoing information may be considered further ~ in the light of the additional independent knowledge which now follows.

A report written by Dr. Alejandro Úbeda, Servicio Investigación-BioElectroMagnetismo, Hospital Ramón y Cajal, 28024 Madrid, Spain, 16th

June 1999, confirmed: thermal effects produced by the medical equipment reported upon here and utilizing an electric current — in a manner that can be seen in parallel to that conveyed on pages 88-89 relating to HYPERTHERMIA wherein reference is made to medical equipment applying electric current at 500 kHz (at the speed of light c) to radiosensitive cancers — were not the underlying cause of cell death. The demise of the cancer cells, was the outcome of the electric current used to create the heat generated by the equipment concerned. It is to be noted, please: electric current has a 'field energy' that operates always at the speed of light c.

[*We have been restrained by threatened legal action from providing details of this equipment, but we are able to substantiate this statement to the European Parliament if required.]

We quote hereunder from the "**Summary Of Conclusions**" reported by Dr. A. Úbeda – freely and honourably to the organization by an ethical member of the Executive of that unnamed organization, for the advancement of nuclear medical knowledge of this Partnership and the betterment of science and mankind.

"At the end of the 24-h treatment the HEP G2 line from human Hepatocarcinoma showed a reduction in the size of the cell population. This response is not mediated by thermal effects and seems to be a function of the imposed current density." "The cells forming human neuroblastoma NB69, showed significant increases in the death rate at the end of the 24-h exposure."

[With reference to the referred "24-h treatment" – the input level within the laboratory of electric particle energy ('field energy' the speed of light c) was low (only '0.5 MHz'), compared to the level of '2.45 GHz of electric particle input' associated with the 'microwave therapy' ('field energy' the speed of light c) – see this Section Three. A few minutes (instead of a '24-h exposure') will be shown to be the treatment period required by the 'microwave therapy' medical equipment under review within this White Paper.]

[NOTE. A copy of the above 3-page report can be provided, by request to this Partnership at info@lightspeedfoundation.com.]

The Partnership holds a copy of the more detailed 11-page report presented to The Technical University, Munich, Germany; prepared during more comprehensive research completed subsequently by ALEJANDRO ÚBEDA, Ph.D. SERVICIO INVESTIGACIÓN-BIOELECTROMAGNETISMO, HOSPITAL RAMÓN Y CAJAL, 28034 Madrid, Spain. The evidence therein is seen to support – "exposure to 100μA/mm² currents at 0.500 MHz can significantly slow down or arrest the mitotic cycle in both HepG2 and NB69 cells. Such an effect could result in permanent cell damage, which is coherent with the cytostatic/cytotoxic effects observed on these human cancer cell lines after treatment with weak, 0.5-MHz electric currents."

[Study commissioned by Dirección General de Productos Sanitarios (NIH, Spain.]

Electric particle 'field energy' at the speed of light c is remedial to radio sensitive cancer and the cause of 'cell death' referred to here. [Refer item 24. upon pages 151-152.]

A copy of the aforementioned "11-page report, that was presented to The Technical University, Munich, Germany", has been provided for retention by the 'Journal of Biological Physics and Chemistry'.

THIS WHITE PAPER DRAWS TO THE ATTENTION OF THE READER:

(a) 'THE TREATMENT OF SKIN CANCER' (pages 69 and 71-73) and 'THE TREATMENT OF LUNG CANCER' (see pages 69 and 73-76) by PHOTODYNAMIC THERAPY (PDT) – employs light (not heat) as the remedial factor in the highly successful treatment of these widespread forms of cancer.

Concerning light:

- (i) The light reaching us from our Sun, is comprised of fundamental photons travelling at 299,792,458 metres per second in a vacuum (which is of course the particle 'field energy' velocity applicable to the speed of light c).
- (ii) An array of solar cells within a solar panel when exposed to sunlight, converts appropriate numbers of the fundamental photons into electrons; in this way creating a usable amount of electricity in the form of direct current.
- (iii) The electron is comprised of 1.2349×10^{20} fundamental gravity photons (pages $20-22 item\ 2$ in particular): the 'field energy' speed of which is that of light c, except when associated with radioactivity.

It has been indicated earlier that the NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE has approved PDT for the therapy of cancers of the skin, mouth, head and neck. We are also aware that lung cancers are being treated very successfully (as yet in only modest numbers) by PDT. To our certain knowledge, PDT is the utilization of electric particle 'field energy' at the speed of light c. HOWEVER – as a direct consequence of the absence of an appropriate knowledge of the fundamental nuclear medical physics presented within this White Paper – PUBLISHED INFORMATION HAS INDICATED that less than 1% of those in need have been able to receive these treatments. [See Supporting Information item 16. page 148.]

This is an unhelpful and unacceptable position, which this White Paper seeks to remedy (together with other serious health matters) on behalf of the medical profession and patients worldwide. [May we repeat please: we are a non-profit organization and have absolutely no financial vested interests.]

- (b) **Radiotherapy** treats successfully *on average* approximately 40 per cent of cancer patients to which this method is applied utilizing *high frequency* X-rays irradiating electric particle 'field energy' at the speed of light *c*. Fractionated Stereotactic Body Radiosurgery claims higher success rates when utilizing numerous 'finely contoured' rays of electric particle 'field energy' at the speed of light *c*. Temperature is not claimed to be the remedial factor with either of these treatments.
- (c) **Microwave Therapy** utilizes electric particle energy at a frequency which comprises part of the electromagnetic spectrum (EMS). Published efficacious rates of success

equal to 95%, have been confirmed during an appropriate university medical trial.

The EMS is formed by a variety of electric particle energies that operate with a 'field energy' equal to the speed of light c. [We remind the reader: in the recent past astrophysicists have produced evidence indicating – gamma rays (which in science remain as yet part of the EMS) travel by the finest of margins at less than the speed of light.]

THE SULIS V^{pMTA} (Accu5i Applicator) MICROWAVE THERAPY EQUIPMENT (a main subject and important aspect of this Part Three) is stated to approximate in size to that of a 'domestic video player' (the latter appertaining to the year 2008, when this 'size comparison' was made). A procedure of significance is the use of a thin probe, which is inserted into a tumour to enable remedial electric particle 'field energy' to be irradiated from within the tumour at the speed of light c. The medical equipment utilizes a microwave frequency of 2.45 GHz, adjustable from 30 to 100 watts. The 'probe' diameter in scale is said to be 'similar to that of a knitting needle' of average size: the procedure can be carried out as keyhole surgery.

RWS THE CONSULTING AUTHOR, DRAWS CERTAIN COMPARISONS HEREUNDER,

Surgeon David Lloyd (who participated in the development of the medical equipment concerned) has indicated: the <u>heat created</u> by the electric particle energy of the ³ 'Sulis V^{pMTA}', microwave Control Unit <u>rises up to a certain level</u> at 100 watts – a temperature which with sincere respect is observed to be above that needed to result in the death of radio<u>sensitive</u> cancer cells. The control unit on the medical equipment will allow for adjustments from 30 to 100 watts, thereby providing appropriate scope for the control over heat level(s) used when treating a patient.

WITH REFERENCE TO CANCER CELLS when energized with electric particle 'field energy' at the speed of light c — an electric particle state which creates a level of <u>heat</u> and thereby a <u>facility of data that is informative</u> when carrying out this form of health treatment' — independent expert knowledge in the field of 'heat injury' conveys that human tissue is close to overheating at 42°C. On pages 87-89 of this White Paper, a number of respected independent examinations indicate the death of *cancer cells at similar temperatures in the range of 43°C, 41-45°C, up to 45°C and 43-45°C. [*Radiosensitive cells will die, within the circumstances referred to here above.]

Some 5 per cent or more cancer cells are radio<u>resistant</u>, in that they have either been ionization-induced, or result from the presence of an inherited abnormal gene. These forms of radioresistant cells do not die at the above heat levels.

At temperatures between 60°C - 69°C, <u>normal healthy cells die</u>. Such cells die within a few seconds when the temperature reaches in the region of 70°C.

IT IS PROVEN BEYOND DOUBT OR RESERVATION: up to 95 per cent of primary cancers are radiosensitive and will respond remedially to an appropriate form of treatment utilizing electric particle field energy at the speed of light c applied by Microwave Therapy or Photodynamic Therapy.

WITH FURTHER REFERENCE TO THE 'SULIS V^{pMTA}' (Accu5i Applicator) MICROWAVE THERAPY CONTROL UNIT: **up to 95 per cent of primary abnormal radio**sensitive **cancer cells** when exposed to electric particle energy at 2.45 GHz, will begin to die when the rising temperatures have reached between 43°C and 45°C: not because of the thermal temperature, but due the total integration of electric particle 'field energy' at this temperature, with the slower 'field energy' of radiosensitive pathogen cells. It has been Surgeon David Lloyd's view – that at 60°C "the tumour goes white" and "has been destroyed". "What is left is dead tissue that will become harmless scar tissue."

In ORDER TO PRESERVE HEALTHY CELLS in the close proximity of the tumour under treatment – it would be prudent to use <u>suitably less than 100 watts</u>. The Control Unit enables the Surgeon to choose an input from 30-100 watts. Surgeon David Lloyd has indicated the following information to the author, referenced below under items (a) (b) and (c).

- (a) When using 40 to 60 Watts, there has been observed to be about 4 to 5 cm of spherical change in the tissues.
- (b) At higher energies with 6-8 minutes treatment at 100 Watts, spherical changes in the tissue reached out to about 8cm.
- (c) Subsequent to the successful treatment of liver tumours by the microwave treatment, the remainder of the liver continues to function normally.

Alternatives open to consideration by the oncologist.

1. PERIPHERAL DAMAGE TO HEALTHY CELLS CAUSED BY **TREAMENT WITH X-RAYS USED IN RADIOTHERAPY,** can result in the development of secondary cancer cells: which metastasize and result in serious deterioration of the health of the patient and sometimes death.

RADIOFREQUENCY ABLATION uses either laser light or radio waves *at the speed of light c* to treat cancer cells by heating the cells to a high temperature. Side effects are usually mild and can be controlled with medication. Serious complications or side effects are uncommon. During treatment the 'heat' generated acts as a

'facility'whereby, the desired efficient level of 'saturation' of radiosensitive cancer cells – by electric particle 'field energy' at the speed of light c – is confirmed by the level of temperature generated having reached between 43-45°C.

2. IN CASES WHERE THE ONCOLOGIST DECIDES TO USE ONLY 30 WATTS OF MICROWAVE THERAPY, and thereby a lower reach is created to the 'heat efficient saturation' – local spherical change to the tissues resulting from treatment would be less than the 40 to 60 Watts referred to on page 92 under (a). The risk factor will vary, dependent on the position and size of the tumour(s) to be treated: such risk will be known to the patient's medical consultant and can *in suitable instances*, be considered minimal and acceptable in the informed judgement of the oncologist.

May we remind the reader of the following information – some of which was indicated earlier in the Press Release, associated with the University of Leicester (pages.49-50).

MICROWAVE THERAPY
was developed by Surgeon David Lloyd –
in collaboration with

Leicester Royal Infirmary and the University of Leicester ~ research was *also* contributed by the University of Bath and the 'presenting organization' Microsulis Medical Limited.

Added to which is the NOTABLE WORLDWIDE value of PHOTODYNAMIC THERAPY – also

the significant advance in electronic WHOLE BODY TREATMENT, which is to be detailed at a later stage in this 'Section Three'.

The 'collective capability' of the above independent techniques offers success in the treatment of a significant proportion of *all* radiosensitive cancers, which constitute up to 95% of all primary cancers.

CANCERS ARE USUALLY NAMED AFTER BODY PARTS – according to where the disease has infected the tissues.

Whereas nuclear medical physics confirms – up to 95 per cent of 'primary' cancers are radiosensitive and 5 per cent or more cancers are radioresistant.

Concerning radiosensitive **cancers.** If or when in the future:-

- (i) The non-invasive TRIMPROB SCANNER can be utilized ideally for the purpose of establishing which of the above cancer types is to be identified as a tumour (or tumours) which are treatable by an appropriate method of applying electric particle 'field energy' at the speed of light c. Radiosensitive tumours are detected at 400 MHz: these are distinguished from healthy tissue or radioresistant tumours, which resonate at 1350 MHz.
- (ii) Provided the treatment method is carried out by ways and means appropriate to the needs of the nuclear medical physics and patient safety, then 100% of radiosensitive tumours may be treated successfully.

Radio<u>resistant</u> cancers are detected by the Trimprob, at an entirely different megahertz to cancers which are radio<u>sensitive</u>.

- (iii) The scanner detects healthy tissue and *also* radio<u>resistant</u> tumours, at a frequency of 1350 megahertz. Tumours *otherwise* known to exist but <u>not</u> detected by this scanner, are thereby confirmed to be radio<u>resistant</u>. Such cancers will be either of two types: ionization-induced, or resulting from an inherited gene.
- (iv) Around 5 per cent or more **primary** cancers will be found to be radio<u>resistant</u>. Subsequent to radiotherapy some new cancers have been considered to be **secondary**: these are likely to include those that have resulted from ionization-induced genomic instability and therefore would be radio<u>resistant</u> the latter cancer type would be consequential to a loss of DNA data, carried formerly by electrons removed by ionizing x-ray radiation.

Cancers that result from METASTASIS, may be either radio<u>sensitive</u> or radio<u>resistant</u>.

Those which are radio<u>resistant</u>, may include cancers resulting from the presence of an abnormal gene within the DNA. <u>It may be possible</u> to treat such cancers. The means of treatment is <u>not</u> included within this White Paper. We are however willing to explore the issues arising with interested professional parties, who contact Robert Wood-Smith, Senior Partner at medical research@btinternet.com.

METHODS OF TREATMENT.

These are *usually* selected by an Oncologist, dependent on the needs of individual cases. In the light of knowledge of the new microwave therapy, cancer diagnosis generally *(coupled now with the advance in nuclear medical physics contained within this White Paper)* it would be prudent for the profession to review with care the matters highlighted within page 94 items (i) and (ii), (iii) and (iv).

QUESTION.

Would it be true to convey – the new microwave treatment could apply to all radio<u>sensitive</u> cancers, in cases where it would be practical to insert a thin probe into the tumour?

ANSWER.

THE MECHANISM associated with the highest levels of remedial success when treating radiosensitive cancers, can presently be applied ideally by either of two appropriate and proven techniques — methods which have in common the application of electric particle energy with a 'field energy' speed equal to that of light c. The Cancer Consultant, Surgeon, or Radiographer may understand — why a certain condition would be more suitable for treatment by Photodynamic Therapy than Microwave Therapy, or vice versa. However at a later stage within this Section Three, reference will be made to serious health conditions which will need a 'whole body' treatment. Specialist new equipment will be required, and is to be suitably outlined at a later stage within this White Paper.

In order to respond further to the question: we will consider next, the implications when applying microwave therapy to radiosensitive pathogens in general.

Under no circumstances should microwave energy be used as a treatment for brain tumours. The recommended temperature 'upper limit' when treating brain cells, is 39.2°C: (see page 97).

Surgeon David Lloyd when making his enquiries, raised a question concerning TREATMENT OF THE PANCREAS – i.e. would there be damage to the nervous system, if the microwave treatment was applied? The following evidence is outlined by way of guidance.

(a) The following evidence from an earlier preliminary and unpublished study of two Motor Neurone disease (MND) patients proposed by Professor Malcolm Hooper, involved significant and appropriate exposure of the entire nervous system of the two patients to electric particle 'field energy' at the speed of light, at the relatively low frequency of 500 kHz at 200 watts over 50 Ω . The results were significant and encouraging.

The conclusion reached was that the electric particle input was significantly less than would be required for the next stage of our research. The report is available to suitable professional bodies by application to info@lightspeedfoundation.com

[In contrast the use of 'whole body' irradiation by high frequency X-rays is not advisable.]

(b) The Sulis V^{pMTA} (Accu5i Applicator) 'Microwave Therapy' Control Unit, utilizes a frequency of 2.45 gigahertz (which is more efficacious than the ionizing xxrays used in radiotherapy). The Control Unit has two inputs for Temperature Probes and associated Temperature Displays. Power level settings range from 30-100 watts.

The Control Unit's time settings are from 30 seconds to 8 minutes. By lowering the wattage, one *also* lowers the optimum heat. Up to 95 per cent of primary radiosensitive cancer cells when exposed to electric particle energy at 2.45 GHz, are known to succumb to this treatment. As yet the standard viewpoint has been, the cells are burned when the temperature reaches 60°C.

- (c) The advance made in 'nuclear medical physics' indicates in the above case, that when the rising temperatures have reached 43-45°C, a sufficient exposure at the latter temperature for the prescribed microwave irradiation time, can be expected to complete the therapy. THE MECHANISM: the atoms of the base pairs forming the DNA are thus elevated to the normal speed of light c, which enables the DNA to decode the original pathogen cells as foreign and mark them for destruction by the immune system. The former radiosensitive cells become dead cells which implies they would burn by microwave energy at 60°C, if this remains the desire. [The profession is aware that macrophages are the 'big eaters' of the immune system, and reside in every tissue of the body they engulf apoptotic cells and pathogens.]
- (d) Knowledgeable independent sources indicate, the utilization of 43-45°C when treating radiosensitive tumours is efficacious effectively, when utilizing electric particle 'field energy' at the speed of light c as the associated means of creating the heat concerned for additional information, please refer to pages 88-89.
- (e) The natural healthy electric particle 'field energy' speed of living tissue (including of course the nervous system) is the speed of light c. When considering treatment of the pancreas, one understands that radiosensitive cancerous tissue if left untreated, would be fatal..

Appropriate treatment with electric particle 'field energy' at the speed of light c, can only prove remedial for such patients.

It is a matter of experience in the use of electric particle 'field energy', that microwave energy is suitable to treat all tumours (except those of the brain) by inserting a probe into the tumour.

High frequency X-rays used in cancer treatment and *on the other hand* a frequency down to as low as 500 kHz – **provides indications that frequency is not the problem**, except in terms of <u>ionization</u> induced by high frequency X-rays. THE TEMPERATURE however generated by molecular friction IS A MATTER OF IMPORTANCE.

Levels of heat should not be higher than *are* **needed for** an ADEQUATE SATURATION and thereby THE APPROPROPRIATE INTEGRATION' of:

- (a) The slower moving electric particle 'field energy' of radiosensitive electrically abnormal pathogen cells *with*
- (b) The inflow of remedial electric particle 'field energy' at the speed of light c.

SUMMARY OF ADVISORY KNOWLEDGE.

Normal cellular tolerance. Healthy living organisms can survive at temperatures of 42-47°C for prolonged periods of time – temperatures above 48°C can only be tolerated for a short period of time. At temperatures from 60°C up to approximately 69°C, normal healthy cells will die: such cells die within a few seconds when the

temperature reaches in the region of 70°C.

An advisory 'safe limit' when applying electrical energy to 'brain cells' is 39.2°C. For treatment of the brain: Oncologists or Radiologists are recommended to communicate with the eminent specialist Dr. Adolfo Ley Valle, c/Muntaner 318 pral, 1^a. (08021) Barcelona, Spain. Or via the Neurosurgical Clinic, University of Barcelona Medical School, Barcelona, Spain.

Suitable temperature control can ensure that no harm is caused to healthy tissue within such as the pancreas and most other tumours yet to be considered. Electrically abnormal radio<u>sensitive</u> pathogen cells within the pancreas and most other parts of the body are in need of treatment. An appropriate use of electric particle 'field energy' at the speed of light c, will be found suitable in meeting the radio<u>sensitive</u> requirement.

A failure to meet specific needs of some eight million cancer patients worldwide, is resulting in many unnecessary deaths. CERTAIN MEDICAL EQUIPMENT REFERRED TO WITHIN THIS WHITE PAPER is already available, and when supported by an appropriate knowledge – appertaining to the advance that has been made in the understanding of nuclear medical physics expressed within this White Paper – these advances have the potential to reduce by some eighty per cent or more, the deaths from cancer.

A FREQUENCY OF ELECTRIC PARTICLE 'FIELD ENERGY'

AT THE SPEED OF LIGHT *c* WILL ESSENTIALLY BE INVOLVED –

irrespective of whether it is the 'field energy' of microwave therapy,
photodynamic therapy, or electric current that is utilized for the treatment of patients.

Electrical Frequencies Associated With Matter.

- **1.** Each single component of any frequency hertz involves the formation of a profile, made by a fundamental (gravity) photon as it creates a waveform (wavelength).
- **2.** The underlying source of *all* electric particle energy reflects the presence of fundamental (gravity) photons. For an atom to exist within the universe, the associated ultra-minute electric particle 'field energy' must be displaced-in-time. That displacement involves the presence of the speed of light c: the *only* exception to this, is where an atom *or* particle is *radioactive. The fundamental photons which comprise a cell, protein, bacterium, virus, chromosome, gene, or base pair etc., form the foundation to a unified 'field energy' electric particle composition of matter and radiation.

*The electric particle 'field energy' of those atoms *or particles* which are radioactive – have a characteristic speed which is **less** than that of light *c*. Because the radioactive electric particle 'field energy' is displaced-in-time at <u>less</u> than the *normal* speed of light *c*, the subatomic electric particle data is out-of-sync with the electromagnetic spectrum. Normal atoms cannot integrate efficiently with the data of radioactive particle 'field energy'.

The latter is an 'electrically abnormal state' – one that gives rise to the manifestation of the symptoms of serious health irregularities which are recorded widely, *and* if not treated appropriately, are likely *eventually* to become lethal.

- **3.** The electric particle energy referred to here applies to subatomic particles the internal 'field energy' of atoms has movement within a standing wave: *i.e.* the electric particle 'field energy' moves back-and-forth. This accounting for the observed vibration of atoms, whether they be normal or radioactive. The electric particle 'field energy' of radioactivity, most commonly takes the form of electric particle radiation at low or *usually* very low-levels within the natural environment.
- **4.** When the atoms comprising electrically abnormal radio<u>sensitive</u> pathogens are treated in a remedial and appropriate way by electric particle 'field energy' at the speed of light c, the unified back-and-forth movement of electric particle energy causes heat to be generated, due to molecular friction.
- 5. When electric particle energy at the speed of light c is irradiated appropriately upon a mass of 'living tissue' which comprises electric particle energy moving at **less** than the speed of light c, the two different 'field energy' speeds merge to form an average speed which is <u>less</u> than c. Because the inflow of 'field energy' at the speed of light c is constant, the 'average speed' of the two energy sources (i.e. that of the tumour on the one hand and the 'net input' upon the other) will rise.
- 6. When in the latter circumstances the temperature of a tumour mass rises to become 43 to 45°C this can be read as a required indication to the Surgeon or Treatment Operative, that an appropriate level of saturation and integration involving the two different 'field energy' speeds is taking place. When provided with a sufficient exposure time reflecting the scale of the tumour, the electric particle 'field energy' of each radiosensitive cell will become elevated to the speed of light c. [The same would apply in the case of an appropriate treatment of a radiosensitive pathogen protein, bacterium, virus, chromosome or gene: see below.]
- 7. When that summarized above within items 4-6 has been achieved throughout the subatomic mass of the 'electrically abnormal pathogen' under treatment the DNA of each pathogen cell (protein, bacterium, or virus) can then decode (*read*) the information associated with the original structure of the electrically abnormal pathogen as foreign, and mark the pathogen for destruction by the immune system.
- **8.** The 'field energy' at the speed of light c associated with the frequency of <u>microwaves</u>, or the wavelengths of light used in <u>photodynamic therapy</u>, also therapy utilizing appropriately <u>electric current</u> (which is to be referred to in suitable detail at a later stage within this White Paper) has a speed that is constant within the laws of physics governing the speed of light c.
- 9. Irrespective of the medium through which electric particle 'field energy' may pass the 'field energy' of the speed of light c will remain constant, unless the medium and thereby the electric particle energy is radioactive.
- 10. RADIOACTIVE ENERGY has a speed associated directly with the electric particles which are the carrier **Alpha** radioactive particles travel at 5-6 per cent of the speed of light c. **Beta** particles travel mostly at 99 per cent of c, some at a slightly slower speed. **Gamma** ray particles travel so close to the speed of light c, that until recently no difference from c

had been detected. Astrophysicists have now recorded gamma rays from a very distant source arriving after light rays from the identical originating source: see item 23. pages 150-51.

GAMMA ray particles are generated by radioactive atoms, also in nuclear explosions. The characteristic of RADIOACTIVE ELECTRIC PARTICLE ENERGY is an electromagnetic 'field energy' which is \underline{less} than the 'field energy' speed of light c. Gamma rays can \underline{beyond} \underline{doubt} result in the death of living cells.

UP TO 95 PER CENT OF PRIMARY CANCERS ARE RADIO<u>SENSITIVE</u>. **Two existing advanced treatments can treat** (between them) **efficaciously in the region of 80% all 'types' of radio**sensitive **cancers worldwide.**

Earlier in this paper (on pages 49-50)) A NEWS PRESS RELEASE headed "Life-Saving Cancer Treatment Pioneered in Leicester – an International Success"

was presented, subsequent to a United Kingdom medical trial following one of the treatments referred to above –

i.e. Microwave Therapy.

"To date, almost 100 patients diagnosed with inoperable liver cancer (terminal cancer) have been treated with the technique and in 95% of these patients the cancer disappeared." "...patients' life expectancies increased, in some cases by several years."

One of these patients said: "When I was first diagnosed with liver cancer I contacted the Mayo Clinic in America for advice and doctors told me my tumours were untreatable. They gave me a maximum of six months to live. I then found out about Mr Lloyd's unique microwave probe and I am now alive and well – four years after being diagnosed with cancer."

Those concerned closely with the development of the new treatment, may not have been aware at the time, concerning to what extent this advance in the treatment of Cancer has much wider applications.

MICROWAVE THERAPY CAN BE UTILIZED FOR THE TREATMENT OF CANCER TUMOURS where the oncologist is satisfied the use of a thin probe is practical – and the temperature raised by the microwaves controlled, reflecting the needs in each case

SURGEON DAVID LLOYD'S EXPERIENCE (reported in person to the author of this White Paper) has been that tumours up to 8cm (3.2 inches) in size have been treated successfully. The 'treatment time factor' has of course to be increased to allow for the efficient and safe treatment of a larger tumour. David Lloyd confirmed the equipment "can treat very large tumours within a few minutes." The Surgeon has indicated "The microwave device is extremely safe, very effective and easy to use" and "is proving to be a significant advance in the treatment of liver cancer."

We have stated that up to 95 per cent of liver cancers are radiosensitive: 95 per cent of the

significant number of cancer patients who were treated during the medical trial were treated successfully by microwave therapy.

THIS WHITE PAPER WILL INDICATE –
Microwave Therapy will be found to be efficacious in cancer cases of any type where:

- (i) The cancer is radio**sensitive**. Up to 95% of 'primary' cancers are of this electric particle conformation.
- (ii) The Oncologist is agreeable *irrespective of where the cancer is placed* within the body of the patient *with the exception of brain tumours
 - (a) It is 'practical' to insert a thin probe into the tumour(s).
 - (b) The level of heat developed by microwave therapy can be contained within safe limits, bearing in mind the position of the tumour which is to be treated.

*The 'temperature limit' for treating a brain tumour has been stated to be 39.2°C. With this in mind, microwave therapy should NOT be used to treat tumours of the brain. [Refer to page 78.]

THE 'MECHANISM' is suitably summarized here below.

- 1. Each single 'microwave' frequency hertz is produced by one fundamental photon of electric particle 'field energy' at the speed of light c. 2.45 GHz of fundamental electric particle photons operating at the speed of light c, comprises the number of electric particles per second flowing from the SULIS V^{pMTA} (Accu5i Applicator) Control Unit. The Surgeon has the option to operate the wattage between 30 and 100 watts. This Partnership recommends a lower temperature than produced at 100 watts is preferable, in order to suitably limit damage to nearby healthy tissue.
- **2. Radio**<u>sensitive</u> **cancers** *are radioactivity-induced* and comprise of atoms which are energized by the electric particle energy of fundamental photons operating with a 'field energy' speed which is <u>less</u> than that of the speed of light *c*: there are no exceptions to the electric particle state referred to here. When irradiated appropriately with a constant flow of normal electric particle energy at the speed of light *c*, the remedial effect upon these electrically abnormal pathogen cells will be as follows:
 - (a) The abnormal slower moving electric particle 'field energy' speed (comprising the atoms of radiosensitive cancer cells) will average their electric particle 'field energy' speed with the normal electric particle 'field energy' of the inflowing microwave energy at the speed of light c.
 - (b) During a remedial microwave therapy because the inflow to the tumour of electric particle 'field energy' at the speed of light c reflects an input at a <u>constant speed</u> the averaging of the two different 'field energy' speeds referred to in (a) will give rise (within a few minutes) to the slower moving

electric particle 'field energy' of the radio<u>sensitive</u> cancer cells becoming elevated to the electromagnetic norm applicable to healthy human tissue - a speed which *of course* is that of the speed of light c.

A consensus of independent medical experience confirms: a temperature of 43-45°C gives rise to the death of radiosensitive cancer cells.

The above electric particle state is achieved, when the molecular vibration causes the temperature to rise to between $43-45^{\circ}$ C and this is maintained for a designated *sufficient* period of time reflecting the tumour size and thereby an appropriate level of electric particle 'field energy' input at the speed of light c.

THE LATTER TEMPERATURE needs be understood by the Surgeon or Treatment Operative to be a suitable confirmation — that a 'satisfactory saturation and integration' of the healthy inflowing energy is taking place, between the abnormal slower moving electric particle 'field energy' speed of the atoms comprising the radiosensitive cancer cells, and the inflowing microwave energy operating at the speed of light c.

[The reader is reminded, please: that stated in a 'black typeface' reflects existing knowledge. Knowledge presented within a 'blue typeface', is contributed from an underlying knowledge of nuclear medical physics beyond the Standard Model, supported by independent medical practise.]

- 4. When an appropriate microwave treatment has been completed, a change of electric particle state will have occurred. THAT IS TO CONVEY: the atoms comprising the DNA of the abnormal radiosensitive cancer cells, will comprise of an normal electric particle 'field energy' speed. The consequence of this is that the DNA data (information) no longer reflects the abnormal original construction of the cell with which it remains associated. THE SEQUEL TO THIS CHANGE OF STATE, is that the DNA can now decode the cancer cells as foreign and mark them for destruction by the immune system.
- 5. The information provided to Robert Wood-Smith (principal author of this White Paper) by Surgeon David Lloyd (University of Leicester medical trial): was that when (during the medical trial) the heat had been elevated to 60°C, the treated cells registered the affect of the high temperature to which they had been exposed. The assumption was made by those concerned, that the cells had been killed by the heat.
 - (a) One can understand 100 per cent of the cancer cells would have been destroyed, if the demise of cancer cells was caused by heat.
 - (b) Only 95 per cent of the cancer cells were destroyed: these being those which were radio<u>sensitive</u> to the irradiation with electric particle 'field energy' at the speed of light *c*.

The standard procedure for setting the temperature of the SULIS V^{pMTA} (Accu5i Applicator) Control Unit, has been to set the temperature to rise up to 60°C. The

appropriate temperature may be set physically by the Oncologist or Operative.

THE ADVANCE WHICH HAS BEEN MADE IN NUCLEAR MEDICAL PHYSICS indicates:

- (a) During the period when temperature is rising from 46°C to 59°C that which otherwise would have been completed efficiently by a sufficient exposure time at a temperature of between 43-45°C, has been overcompensated for during the on-going rise in temperature towards the target of 60°C.
- (b) **Ideally in future cases** as indicated earlier, the temperature Control Unit needs to be set to between 43°C and 45°C (45°C ideally) for a designated suitable period of time dependent on the size of the tumour, and the need for a complete saturation and integration of the remedial 'field energy' speed to take place at the speed of light *c* as provided for by microwave therapy.

THE SURGEON DAVID LLOYD AND ASSOCIATED TEAM utilized *very properly* the information available to them, during the design and development stages of the Sulis V^{pMTA} (Accu5i Applicator) Microwave Therapy Control Unit.

In our view, those who have been concerned with the 'design and development' of the above treatment of Cancer by microwave therapy, are owed a sincere debt of gratitude for their research which, we now understand at this subsequent stage, have an immense potential for the future successful treatment of radiosensitive cancers worldwide.

This Partnership makes the recommendation: the use of a temperature as high as 60°C can be avoided, in the interest of healthy tissue within close range of the microwaves irradiating from the treatment probe. This will also increase helpfully the range of cancer types for which microwave therapy is appropriate.

[Biologists are aware: the body's dead cells can be disposed of without the intervention of a high temperature. **Microphages** are white blood cells, that act as scavengers of dead cells and cellular material which they engulf by phagocytosis with subsequent internal degradation of the material. Microphages develop from monocytes which migrate from blood into tissues including the brain, liver, lungs, lymph nodes, spleen and connective tissue: they also participate in the immune response by responding to inflammatory cytokines. The decision concerning how *in each case* the ultimate disposal of the dead cells should be dealt with, lays with the Oncologist.]

During the University of Leicester medical trial, 5 per cent of the tumours were not killed (i.e. proved to be radio<u>resistant</u>). A position which indicated: that radio<u>resistant</u> tumours are neither killed nor destroyed by heat at 60°C.

The opinions of some clinicians remain perverse, necessitating our understanding of microwave treatment having to be convincingly reported.

Of the nearly one hundred cancer patients treated with microwave therapy during the University of Leicester medical trial – in 5 per cent of cases, the cancer cells did not respond to the treatment (see within pages 49-50).

WITH RESPECT, if it was the case (as indeed some in the past have believed) that – in the

case of 95 per cent of the patients – the cancer cells had been killed due to heat – HOW THEN WAS IT ALSO THE CASE that the identical heating of 5 per cent of the patients' cancer cells proved to be unsuccessful: they were <u>not</u> destroyed by heat?

THE REASON reflects the 'reality' of an 'electric particle difference' between:

- (a) The radiosensitive characteristic of the atoms that comprised 95 per cent of the cancer cells, and which were treated with success by the microwave treatment operating at the speed of light *c* and
- (b) The radioresistant characteristic of the atoms comprising the electric particle 'field energy' of the cancer cells appertaining to the remaining 5 per cent of patients, whose cancer cells were left unaffected by the identical treatment.

PLAINLY: if heat was the true cause of the demise of the 95% of cancer cells, then all of the cancer cells would have been destroyed by a treatment that was dependent on heat to burn the cancer cells.

TO SUMMARISE ~

we will collate relevant knowledge from within this White Paper.

It was confirmed (on page 60) – by John Stephens (former Director of The Biofield Corporation) by personal communication to Robert Wood-Smith (RWS) in 1999, that the BIOFIELD DIAGNOSTIC SYSTEM (BDS) was considered a failure since it only detected 95% of the 100 known cancers within a sample of 463 people. John Stephens asked RWS for an explanation of this result. John Stephens made a request to RWS, for an explanation concerning why the BDS did not detect all of the 100 known cancers within the sample?

The knowledge contained within item 12 on pages 60 to 63, is associated with a reality that can now be understood. The atoms comprising in this case *5 per cent of the known cancers (within the Official independent medical trial) were NOT ENERGISED ELECTRICALLY BY THE ABNORMAL LOWER FREQUENCY, which applied to the slower than normal 'field energy' speed referred to appropriately within this White Paper as radiosensitive, and applied to each of the cancers treated successfully within the independent trial.

The specific 'cancer type' that accounted for only 5% of the abnormal cancerous tissue – were in fact radio<u>resistant</u>. The Biofield Diagnostic System (and also please note the Trimprob scanner) were variously designed in such a way, they were to read some cancers as 'electrically normal tissue'. <u>Note please</u>: *the proportion of radio<u>resistant</u> cells (5% in the BDS trial) will vary, dependent on a number of local conditions.

It was *also* stated on pages 60-61 – the BDS scanner could not detect 5 per cent of the sample cancer cells. At that time – the latter equipment was considered to be a failure, for which the scanner was criticized. The reader may recall, the latter

position resulted in John Stephens (a BDS Director in 1999) raising the question subsequently with RWS (principle author in 2014 of this White Paper) — why had there been a failure of the BDS to detect more than 95 per cent of 100 known cancers? [John Stephens indicated to RWS that Imperial Cancer Research Fund, London, United Kingdom, had conveyed to him — the Partnership was "the most likely source of the knowledge" which the Biofield Corporation was seeking to ascertain.]

Pages 61-63 conveyed KNOWLEDGE OF THE 'TRIMPROB SCANNER'. This equipment is designed specifically to detect the *lower frequency hertz, which applies in the case of up to 95 per cent of primary cancer cells. [*The underlying science appertains to an advance in nuclear physics that is associated with radiosensitive electrically abnormal pathogens: whether these consist of an abnormal cell, protein, bacterium, or virus. The fundamental physics is seen to parallel also, the underlying cause of drug resistance and the NDM-1 gene.

FACT.

The Trimprob scanner detects radio<u>sensitive</u> cancers at a frequency of 400 megahertz. Healthy tissue and radioresistant cancers are detected at 1350 megahertz.

FACT.

During a life-saving cancer treatment pioneered at Leicester University (United Kingdom) – a medical trial involving nearly 100 patients and more than 200 tumours – the patients' cancer cells were treated with the Sulis V^{pMTA} (Accu5i Applicator) Microwave Therapy Control Unit, (*Press Release pages 49-50*). The treatment was efficacious for 95 per cent of the patients: that is to convey, the cancer cells of 95% of the patients proved to be radiosensitive.

INTERLOCKING CERTAIN RELEVANT FACTS.

THE TERM RADIO<u>SENSITIVE</u> IMPLIES: the electric particle characteristic of the atoms which comprise cancer cells – are associated with:

- (i) An abnormal slower moving electric particle energy speed: a specific characteristic that makes the cells <u>sensitive</u> to the efficacious remedial influence of electric particle 'field energy' at the speed of light c
- (ii) **Objective scientific evidence indicates** the latter 'slower moving electric particle speed', results in a lower number of fundamental photons per second (each carrying an ultra-minuscule electric charge) producing a frequency in the region of *400 megahertz. This is the frequency hertz detected by the Trimprob scanner in cases where tumours are stated within this White Paper to be radiosensitive.
 - *The Trimprob scanner provides a valuable confirmation of an 'electrical difference' in that healthy tissue and radio<u>resistant</u> cancer cells are recorded showing, a **frequency hertz equal to 1350 megahertz**.
- (iii) During the University of Leicester medical trial, 95 per cent of the

cancer cells (*i.e.* those which were radiosensitive) duly responded remedially to the inflowing microwave electric particle 'field energy' at the speed of light c, when irradiated by the Sulis V^{pMTA} (Accu5i Applicator) Microwave Therapy Control Unit.

(iii) Microwaves reflect *of course* a recognized frequency of electric particle 'field energy' at the speed of light *c*. The 'remedial inflow' of this normal electric particle 'field energy' to abnormal cells during the clinical trial, served to elevate the DNA data of each of the *radio-sensitive* cancer cells to the speed of light *c* – thereby enabling the DNA to decode the original structure of every *such* cancer cell as foreign, and mark these for destruction by the immune system. [It is a recognized normal function of the DNA, to mark foreign components for destruction by the immune system.]

IN REALITY – the 5 per cent of patients' cancer cells that drew no benefit from the microwave treatment during the medical trial, were radioresistant. For the latter reason, these cancer cells did not and could not respond to microwave therapy, comprised of remedial electric particle 'field energy' at the speed of light c.

IN FUTURE IT WOULD BE ADVISABLE to determine the frequency associated with a cancer, using the Trimprob scanner to enable the selection of patients suitable for microwave therapy. This would make cancer treatment more effective, with consequent reductions in recovery and other costs. The Trimprob scanner should be used to scan patients prior to an appropriate electric particle treatment – all radioresistant cancers would record a frequency of 1350 megahertz – compared with 400 megahertz that would be recorded from patients' with a radiosensitive cancer.

[*Radio<u>resistant</u> cells would be either ionization-induced: or cancer resulting from an inherited abnormal gene. A significant proportion or the entire cancer regime appertaining *at the time* to such a patient, may be of the same cancer type.]

Radioresistant cancer cells are formed by atoms that have a 'normal' electric particle 'field energy' speed, which is that of the speed of light c. The atoms which comprise these cells, draw no benefit from 'like-with-like' treatment by an inflowing energy with the same 'field energy' speed – whether provided by microwave therapy / light itself via photodynamic therapy / or the 'field energy' of AC or DC *electric current via an appropriate and safe method of treatment. [*Information with reference to the last mentioned method of treatment, will be provided later within this White Paper.]

7. The World Health Organization has indicated, the rising number of deaths worldwide from Cancer approximates at the time of writing to 8.2 million per year: a figure that has increased from 7.6. million in 2008.

This Partnership estimates worldwide: there are regions where it may prove practical for 80 per cent or more Cancers to be treatable either by Microwave Therapy (MT) or in certain instances Photodynamic Therapy (PDT). There are however regions' of the globe, where the proportion of radioresistant cancers will *in*

some localities be more numerous and therefore, the proportion of cases where MT or PDT can achieve efficacious rates of success, will to be reduced.

Data from the United States and United Kingdom has indicated, up to 95 per cent of cancers are radiosensitive. Data from Italy has indicated, the percentage of radiosensitive cancers in some regions can be as low as within the sixties per cent. The lesser of the two figures stated here above, reflects the existence of a higher proportion of cancers which are resistant to remedial irradiation at the speed of light c. This is due to either regional levels of ionizing radiation, a consequence of the number of people who reside at higher than average altitudes, or in other instances, result from an inherited abnormal gene. [Note. A higher proportion of abnormal genes amongst a local population, can be associated with a more than usual number of intermarriages within perhaps the more remote areas of the population.]

Within 'Supplementary 'Reference' Information', 'A continuation into Section Three', item 14 on pages 145-147—

knowledge is provided, which indicates *MALIGNANT MELANOMA SKIN CANCER has been shown to be treated efficaciously, by the dual use of radiotherapy (X-rays have an electric particle 'field energy' at the speed of light c) followed by Electron Replacement Therapy i.e. the utilization of electric current at 500 kHz. Note: only at low frequency, can ionization-induced genomic instability be treated efficiently.

Independent photographic medical evidence before and after treatment is provided.

*Deaths from malignant melanoma exceed significantly, those from other forms of skin cancer. A successful 'dual treatment' indicates the presence of radiosensitive and radioresistant cancer cells – both are treated, in support of the efficacious outcome that is shown *on pages 145-147*.

Other cases of ionization-induced genomic instability will need a 'whole body' treatment: in support of which, new medical equipment (to be specified) will be described within a suitable later stage in this 'Section Three'.

This White Paper is now to move on – within this 'Section Three' – to the subject of

DRUG & ANTIBIOTIC RESISTANCE [Referred to again commencing on page 134.]

'Section Two': as well as 'Section Three' up to this page, provide much of the necessary background information for this section.

1. DRUG RESISTANCE has become a major health problem. The fundamental underlying cause and treatment thereof, is associated with the development of electrically abnormal pathogens which have proved resistant to a drug.

Terms of reference:-

Pathogen.

- (i) A disease-producing micro-organism in the form of a bacterium, protein. or virus.
- (ii) New Delhi Metallo-beta-lactomase-1 (NDM-1) is an enzyme which renders bacteria resistant to a wide range of beta-lactam antibiotics.
- (iii) A cancer cell which is radio<u>sensitive</u> (i.e. sensitive to input with electric particle 'field energy' at the speed of light c), or radio<u>resistant</u> (that is either ionization-induced, or propagated under the influence of an abnormal gene).

Pathogens are disease-causing agents. Up to 95 per cent of primary cancer cells take the form of an electrically abnormal pathogen. Other forms of such pathogens include electrically abnormal proteins, bacteria, or viruses. Horizontal gene transfer – enables propagation of such electrically abnormal pathogens.

Antimicrobial resistance – reflects in part a capability of micro-organisms to withstand antimicrobial medicine(s).

Drug resistance in bacteria, viruses and cancer cells, develops via genetic changes reflected in these organisms/cells, resulting in fundamental changes in biochemistry. The reason that drug resistance has not been understood, is that the relevant change in biochemistry can be understood *only* at the most fundamental nuclear level.

2. DRUGS AND ANTIBIOTICS are formed *at fundamental level* by atoms energized by electric particle data operating within a standing wave at the speed of light *c*. LIVING TISSUE AND MICRO-ORGANISMS that may be considered normal, are also formed by electric particle data operating within a standing wave at the speed of light *c*. [The term 'normal' here – excludes all 'electrically abnormal' living tissue and microorganisms: this for reason of the atoms concerned being operational at less than *c*.]

Electric particle data at the speed of light c passes efficiently between atoms which on the one hand comprise drugs or antibiotics and on the other hand form 'normal' living tissue. Therefore it is to be understood, the same applies between drugs or antibiotics and 'normal' cells, bacteria, proteins, or viruses.

In the vast majority of cases – the atoms which comprise drugs or antibiotics are NOT SUBJECT TO INFLUENCE subsequent to manufacture, by radioactivity or ionization. **Radioactivity** has the characteristic of a 'field energy' speed that is *always* <u>less</u> than that of light *c*: the effect of which is to distort the electric particle data carried by atoms that are under its influence. **Ionization** removes electrons from their orbits around atoms: the effect of which is to remove from atoms, subtle aspects of the electric particle data that was carried formerly by the electrons concerned.

3. <u>In instances where a disease has as its agent</u> AN ELECTRICALLY ABNORMAL PATHOGEN, the pathogen will manifest a form of 'resistance' to a drug or antibiotic. In cases where *for example* 'interference with cell division' is the aim of the medication, or 'cells are to be denied oxygen'; the drug is considered successful. However, such medication does not reflect an appropriate treatment of the underlying cause – only a symptom of the disease.

Note: the nuclear medical science associated with the NDM-1 resistant gene, we comment upon later in this White Paper, page 135, item 4 *forward*.

THE MECHANISM of drug or antibiotic 'resistance':

(a) THE UNDERLYING CONTENT of a drug or antibiotic, takes the form of electric particle data which is carried *back-and-forth* within the standing wave of each fundamental photon comprising the atoms of the drug or antibiotic.

THE SUBATOMIC ELECTRIC PARTICLE DATA of a DRUG or ANTIBIOTIC, is operational within the displacement-in-time of electric particle 'field energy' at the speed of light c.

[Only in very rare circumstances where a drug or antibiotic has been exposed to radioactivity or ionization at beyond that considered a normal level, can there be an exception to that stated in here in (a). In the unusual instance of a drug or antibiotic having been exposed to a significant level of radioactivity or ionizing radiation, the information carried by the subatomic electric particle data (of the drug or antibiotic) will be distorted. This as a consequence of either the abnormal slower speed of the radioactive electric particle 'field energy' which has been present, or some of the electronic data carried by the drug or antibiotic will have been removed due to ionization.]

- (b) An ELECTRICALLY ABNORMAL PATHOGEN can consist of an abnormal cell, bacterium, protein, or virus also an enzyme producing micro-organism that carries an abnormal gene. The electric particle data of any of these, will be operational within a 'field energy' displacement-in-time that is <u>less</u> than the speed of light *c*.
- (c) When a drug or antibiotic is absorbed into the bloodstream of a patient infected with an electrically abnormal pathogen, the electric particle data associated with that drug or antibiotic is unable to interrelate efficiently with the abnormal slower moving electric particle 'field energy' data associated with the <u>underlying cause</u> of the disease affecting the patient.
 - i) DISPLACEMENT-IN-TIME IMPLIES: the movement of electric particle 'field energy' at a given speed over a distance-in-time, displaced by the waveform carrying the electric particle 'field energy'.
 - ii) The slower moving 'field energy' speed of the electric particle 'field energy' of the electrically abnormal pathogen, will be unable to merge (*interrelate*) with the normal electric particle 'field energy' speed of the drug or antibiotic.
 - iii) This will result in the displacement-in-time of the electric particle data (associated with the drug or antibiotic) being 'resisted' by the electrically abnormal pathogen because of the two different particle energy speeds.

(d) THE LATTER CONDITION IS KNOWN WIDELY AS 'RESISTANCE'.

The reality of the position:

- (i) It is impossible for electric particle data associated with a drug or antibiotic to merge (*interrelate*) with a pathogen, where one aspect of the 'electric particle data' is operating at the speed of light c and the other is moving 'out of sync' with the former at a slower 'field energy' speed. Such will always apply when treating an electrically abnormal pathogen.
- (ii) Furthermore, the data associated with a drug or antibiotic, will be focussed in some way upon the symptom(s) of the illness. In no way can a drug or antibiotic, present an appropriate treatment of the underlying cause of the illness concerned, which (*in reality*) is concerned with a difference in electric particle 'field energy' speed.
- (e) CHANGES TO THE INFECTION CHARACTERISTIC are induced by any slowing down of the 'field energy' speed, associated with electric particle data of the affected DNA and/or RNA. This is likely to include genetic change, induced genetic mutation, and in some instances the acquisition of resistance genes.

A genetic map of Cancer published in the *Guardian (*United Kingdom*) August 2013, reveals pathways of mutation that lead to disease. Up to 95 per cent of these mutations will be found to be radio<u>sensitive</u> – the underlying cause and treatment of which, is being explained in suitable detail herein.

A parallel process reflects the underlying cause of *all* radio<u>sensitive</u> pathogens: these *include also* electrically abnormal proteins, bacteria, viruses and genes. The website to which we are pleased to refer (*with suitable acknowledgment and thanks to the *Guardian newspaper for their service to the people and medicine*) is http://www.theguardian.com/science/2013/aug/14/genetic-map-cancer-mutation-disease

Attempts to treat the symptoms associated with 'resistance', has been (unwittingly) to bypass the underlying cause – which has the characteristic of a difference in electric particle 'field energy' speed as between a drug or antibiotic on the one hand, and an electrically abnormal pathogen upon the other.

- 4. **THE 'MECHANISMS'** associated with THE REMEDIAL TREATMENT for DRUG or ANTIBIOTIC resistance, are as follows:
 - A. THE UNDERLYING CAUSE of drug or antibiotic 'resistance' will reflect a specific health condition of the patient.
 - B. In cases where a drug or antibiotic has been administered to a patient, any consequential resistance to a desired remedial effect will reflect –

- (i) A disease whose underlying cause is that of **an electrically abnormal** pathogen. OR
- (ii) In perhaps 5% or more cases of Cancer for example, the underlying cause will be either ionization-induced (Supplementary 'Reference' Information 14. pages 145-147) or, is the result of an inherited abnormal gene.

The pathogen concerned may have been *already* recognized as an abnormal cell, protein, bacterium, virus, or gene. In at least up to 95% of cases, the electric particle condition is likely to be radiosensitive and thereby treatable

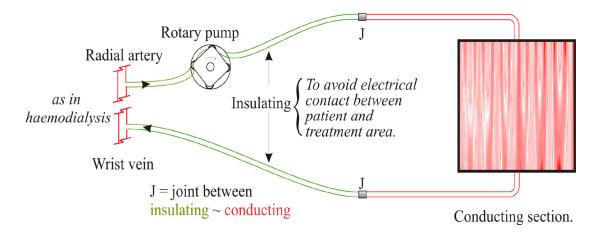
[Subject matters concerning specifically NDM-1, will be commented on at a suitable stage later within this White Paper.]

- C. There are recognized to be a growing number of diseases which have shown resistance to drugs and/or antibiotics. An appropriate treatment will need to:
 - (i) Treat electrically, the blood supply of the patient.

CANCER OF THE BLOOD *in many instances* can be treated efficiently, in a manner which is parallel to dialysis: the Dialyzer being replaced with a *Conducting Section, wherein electric current is applied *safely* to the patient's blood – with a temperature in the range of 43°C to 45°C. **New equipment will be required for this purpose**. Unlike normal dialysis, a single treatment is likely to prove sufficient. [The latter new equipment *(which is 'outlined' on the next page)* will need to be trialled for the purpose of providing necessary guidance concerning treatment times.]

We illustrate below the Conduction Section – wherein the reader will note the incorporation of a dialysis type procedure for treatment of the blood supply: a form of treatment similar to dialysis, the Dialyzer having been replaced with a 'Conducting Section' – the function of which is to provide an efficient and safe transmission of electric particle 'field energy' at the speed of light c (at a temperature of 43°C to 45°C) to the blood supply. Such a new treatment for the blood supply can be shown to be a most urgent and widespread need, for hospitals and clinics worldwide.

Diagrammatic Information is available to readers, upon the next page.



(ii) However in many instances, a whole body treatment will be required.

NEW SPECIALIST MEDICAL EQUIPMENT' will be needed, in order to provide a life-saving 'WHOLE BODY TREATMENT' in support of any of a significant number of serious health problems. Specific introductory information is to be conveyed within item D. on pages 112-114. **Meanwhile**, the dialysis Conduction Section has been shown on this page 111.

There are three main types of blood cancers:

- a) **Leukaemia**: a cancer of the blood and bone marrow, caused by the production of abnormal white blood cells.
- b) **Lymphoma:** a blood cancer which affects the lymphatic system. Lymphocytes are white blood cells which fight infection. Lymphoma cells are formed by abnormal lymphocytes. There are two main types: Hodgkin lymphoma and non-Hodgkin lymphoma.
- c) **Myeloma**: a cancer of the plasma cells: abnormal white blood cells producing disease and antibodies. In cases of myeloma the cells overgrow, forming a mass or tumour in the bone marrow where red cells, white blood cells, and platelets are formed.

EFFICACIOUS RATES OF SUCCESS are predicted to prove similar to the highly successful outcomes reported earlier for Cancer within this 'Section Three'. That is to convey up to 95 per cent: with regional variations, due to local conditions affecting the proportion of cancers that are either radiosensitive or radioresistant. [Additional information within items (b) and (c) on page 139.]

There will be cases, where it is understood there exists a continued presence of the original source of the cancer infection of the blood. Such a condition would introduce reinfection within the bloodstream, subsequent to the treatment process outlined above. In these cases a 'whole body' treatment will be more appropriate where radiosensitive cells are involved.

D. THERE ARE A GROWING NUMBER OF SERIOUS HEALTH CONDITIONS which are associated with an abnormal pathogen. We will name shortly (within this Section Three) the most longstanding of these: but first of all we make the following statement — a number of 'drug and antibiotic resistant' health conditions will be found to be in need of an appropriate 'whole body' treatment with electric particle 'field energy' at the speed of light c. The process we referred initially on pages 110-11 item C (ii): a correct remedial process for normalization of the health condition known as 'resistance'. [Note please: electrical dialysis of the blood supply, may be considered an allied treatment: see item C (i) on page 110.]

Suitable medical equipment for a new 'whole body' treatment – and the 'mechanism' associated with the proposed medical equipment – we are prepared to discuss in 'appropriate detail' with an appropriate manufacturer of electrical medical equipment. In the past it would be true to convey that some unnamed persons have regarded their vested interests as a reason to obstruct the work of this medical research partnership. It is hoped that their thinking will be modified in future, to support the manufacture and introduction of the proposed new treatment.

<u>Concerning those health conditions we have indicated on page 111</u>, the best known are marked as shown here *below and on the next two pages.

These are instances where *completely independent* researchers have reported progress, when drawing upon the use of electric particle 'field energy' at the speed of light c. We indicate two exceptions itemised (c) and (g), where *up to this time* — we have lacked an appropriate opportunity to seek further knowledge, in order to test our proposed treatments.

THE PROPOSED NEW 'WHOLE BODY' MEDICAL EQUIPMENT referred to in item (ii) on page 111, is expected to conclude positively the treatments of those diseases marked # on this page and the next two pages.

COLOUR CODED in lighter 'blue' typeface – is a brief outline of a new method of treatment, which has already been applied to each of the cases we are now to comment upon.

(a) #AIDS (a virus which is associated with a deficient immune system, formed by abnormal proteins and cells). [The safe use of electric particle 'field energy' at the speed of light c, was the method of treatment utilized during a successful European AIDS medical trial.] The Dean of a university's Health Faculty, on learning of the success of the above clinical trial, invited Robert. Wood-Smith (RWS) to prepare a detailed report, in co-operation with the Consultant who treated many of the patients during the relevant European hospital trial.

The Dean wrote to later to advise, the report had been suppressed by persons with "deep pockets" and "vested interests". **The World Health Organization**

was informed. *Its response on 5th February 2004 from the Assistant Director-General HIV/AIDS, stated – "our portfolio does not include support to the development of novel HIV treatments." This vital knowledge has continued to be suppressed. It is estimated more than 15,000,000 AIDS patients have died (some would say needlessly) since that time. [*A copy has been provided for the Editor of the above letter.

- (b) *Alzheimer's Disease (an 'abnormal' beta-amyloid protein).

 [Independent researchers associated with a UK university, have experienced a degree of success when utilizing electric particle 'field energy' at the speed of light c as a treatment for this disease. An offer to provide (without charge or obligation) the latest knowledge, was not taken up by those concerned.]
- (c) BSE and vCJD (an abnormal PrP protein). Ministers in the UK have been advised of a risk of vCJD infecting about 30,000 Britons, from blood donors carrying the degenerative disease in dormant form. [vCJD is almost certainly treatable, based on information within this White Paper.]
- (d) **Cancer (abnormal radiosensitive or radioresistant cells).

 [Electric particle 'field energy' at the speed of light c utilizing either of two newly developed techniques, drawing upon Microwave Therapy and Photodynamic Therapy have provided independent and well proven university and hospital efficacious rates up to 95 per cent. Suitably detailed knowledge has been provided within 'Section Three' of this White Paper.] Please see also further information on pages 127-8 item 2. (a) and (b).
- (e) *Motor Neurone Disease (the dysfunction/death of motor neurones due to genetic abnormalities i.e. mutations of the SOD1 and androgen receptor genes an abnormal gene that encodes for an abnormal protein). [Subsequent to the invitation of Malcolm Hooper, Emeritus Professor of Medicinal Chemistry a preliminary Research Study was carried out, utilizing electric particle 'field energy' at the speed of light c. Although the available medical equipment was underpowered and thereby less than ideal, the results were sufficiently positive to justify utilization of the proposed new 'whole body' medical equipment referred to (initially) on page 111.]
- (f) **Multiple Sclerosis (an 'abnormal' B7 protein; there is also another pathogen lymphocyte cells associated with the immune response).

 [A natural source of direct current at the speed of light c, has served to remove all traces of the disease on more than one published occasion.

 The knowledge and detailed understanding of the author of this White Paper indicates, the 'whole body' treatment (referred to on pages 111-114) would enable an appropriate treatment of this disease to take place.]
- (g) Muscular Dystrophy (a severely 'abnormal' dystrophin protein).
- (h) **Parkinson's Disease (an abnormal alpha synuclein protein).

 [Two independent cases of direct current at the speed of light c, have served to remove the symptoms of this disease. Case One: a surgeon installed with notable success, an in-body direct current treatment. Case Two: a natural

source of direct current, served to remove all trace of the disease. RWS understands that the treatment introduced within pages 111-114 in association with an electric particle 'whole body' treatment at the speed of light c – will provide the effective treatment for the needs of this disease.]

Drug Resistance is associated by the medical profession – with antimicrobial resistance by microbes such as bacteria and viruses *also* some cancers,that continue in the presence of a drug which would usually kill or limit such growth. Multidrug resistance is a major factor in the failure of many forms of chemotherapy.

Antibiotic Resistance describes the capability of a micro-organism to resist the action of antimicrobial drugs. Professor Dame Sally Davies, Chief Medical Officer, Department of Health, London (*Reuters*) has indicated that this health condition "poses a catastrophic threat to medicine and could mean patients having minor surgery risk dying from infections that can no long be treated." "Over the past two decades there has been a discovery void around antibiotics …"

The NDM-1 enzyme-producing gene is electrically abnormal and thereby able to inactivate carbapenems and other beta-lactum antibiotics. NDM-1 infected bacteria are commonly resistant to multiple antimicrobials. Laura Piddock, Professor of Microbiology at the University of Birmingham, United Kingdom has said, "There are an increasing number of infections for which there are virtually no therapeutic options, and we desperately need new discovery research and development." This means the establishment will be required to open their minds to a vital advance in nuclear medical physics which lays beyond the Standard Model. [Referred to pages 135-136.]

The last three health conditions we have referred to, can now be approached in the light of the advance in nuclear medical physics set out within this paper. These electrically abnormal health conditions **are** potentially treatable, by the utilization of appropriate new medical equipment that is being presented within this White Paper. [Reference item D, commencing on page 112.]

5. ANTIBIOTIC RESISTANCE when imposed on bacteria by NDM-1.

<u>During the Spring of the year 2008</u> – a report headed 'MEDICAL SCIENCE IS IN CRISIS, WORLDWIDE' was prepared by this Partnership and presented to Sir Liam Donaldson, Chief Medical Officer for the Department of Health, London, United Kingdom. On page 15 the following prediction was made:

"'Antibiotic resistant' infectious diseases
present a significant threat to medical services worldwide."

Development of the NDM-1 'resistance gene' was first reported within the medical profession during 2010 to 2012.

NDM-1 is seen to be responsible for an enzyme which induces resistance to many potent antibiotics, including the carbapenems. The abnormal NDM-1 resistance gene is encoded to produce an electrically abnormal enzyme, which has demonstrated its ability to move into bacteria. Researchers report, <u>infections vary from asymptomatic</u> – *i.e. capable of transmitting NDM-1 but not exhibiting symptoms* – <u>to health conditions that are potentially life-threatening, or fatal</u>.

Currently the level of risk is said to depend on which part of the body is affected by the infection and the general health of the patient.

The electrically abnormal, NDM-1 'resistance gene', encodes the propagation of an enzyme which can inactivate carbapenems and other beta-lactams. Bacteria harbouring the NDM-1 gene are resistant commonly to multiple antimicrobials: thereby limiting therapeutic options and rendering severe infections difficult to treat. It has been stated: a "patient's blood grew NDM-1 Carbapenemase-producing Enterobacteriaceae" (confirmed by the regional Public Health Laboratory Services Branch, Hong Kong – case of NDM-1 Carbapenemase-producing Enterobacteriaceae under CHP investigation – April 15 2013). For treatment of the blood supply, the reader may refer to item C. pages 110-111. [Reference was made to the subject matters on pages 127 and 135.]

The National Collaborating Centre for Infectious Diseases, has described NDM-1 as "The Pinnacle of Antimicrobial Resistance".

An informed and authoritative presentation – a keynote address by

Dr Margaret Chan,
Director-General of the World Health Organization,
was given in Copenhagen, 14th March 2012.

An extensive extract is given below:

'COMBATING ANTIMICROBIAL RESISTANCE: time for action.

"The antimicrobial threat is easy to describe. It has an irrefutable logic.

Antimicrobial resistance is on the rise in Europe, and elsewhere in the world. We are losing our first-line antimicrobials. Replacement treatments are more costly, more toxic, need much longer durations of treatment, and may require treatment in intensive care units.

For patients infected with some drug resistant pathogens, mortality has been shown

to increase by around 50%. Let me give an example of what this means for a disease of global significance.

Among the world's 12 million cases of tuberculosis in 2010, WHO estimates that 650,000 involved multidrug-resistant TB strains. Treatment of MDR-TB is extremely complicated, typically requiring two years of medication with toxic and expensive medicines, some of which are in constant short supply. Even with the best of care, only slightly more than 50% of these patients will be cured.

Many other pathogens are developing resistance to multiple drugs, some to nearly all. Hospitals have become hotbeds for highly-resistant pathogens, like MRSA, ESBL, and CPE, increasing the risk that hospitalization kills instead of cures. These are end-of-the-road pathogens that are resistant to last-line antimicrobials.

If current trends continue unabated, the future is easy to predict. Some experts say we are moving back to the pre-antibiotic era. No. This will be a post-antibiotic era. In terms of new replacement antibiotics, the pipeline is virtually dry, especially for gram-negative bacteria. The cupboard is nearly bare.

Prospects for turning this situation around look dim. The pharmaceutical industry lacks incentives to bring new antimicrobials to market for many reasons, some of which fall on the shoulders of the medical and public health professions. Namely, our inability to combat the gross misuse of these medicines.

From an industry perspective, why invest considerable sums of money to develop a new antimicrobial when irrational use will accelerate its ineffectiveness before the R&D investment can be recouped?

A post-antibiotic era means, in effect, an end to modern medicine as we know it. Things as common as strep throat or a child's scratched knee could once again kill.

Some sophisticated interventions, like hip replacements, organ transplants, cancer chemotherapy, and care of preterm infants, would become far more difficult or even too dangerous to undertake.

At a time of multiple calamities in the world, we cannot allow the loss of essential antimicrobials, essential cures for many millions of people, to become the next global crisis."

[Médecins Sans Frontiéres has warned that – multi-drug-resistant TB represents "one of the gravest public health threats facing the world today".]

The advance in nuclear medical physics associated with drug and antibiotic resistance, offers new and comprehensive treatment for <u>all</u> drug resistance, whatever antibiotic or anticancer agents are involved.

This paper provides the essential background information to enable all readers to understand specific new advances in medical physics beyond the Standard Model, and how this introduces completely novel treatments for a number of serious medical conditions.

When the necessity of knowledge beyond the 'Standard Model' is indicated, the utilization of a blue typeface will continue to be employed.

The application of these advances beyond the Standard Model represents a paradigm shift. Such advances are at first denied, resisted by experimentation, then gradually accepted before being fully incorporated into the corpus of scientific knowledge. At present this evidence has been the subject of denial. New confirmatory evidence in support has accrued: some seem willing to remain in ignorance and refuse to engage with this information. An educative process is requested. This paper attempts to provide an 'easy read', as far as is possible, so that those outside the field of advanced medical physics can engage with this paradigm shift.

It is to be expected that scepticism may be held by some people, during the initial stages of consideration appertaining to a significant advance in scientific knowledge, and the medical application(s) thereof. With this in mind it may be appropriate to convey: an eminent adviser has in the past felt the need to convey – "If there is one thing to be learned from history, it is that people do not learn from history."

Common sense for some and 'history' would indicate for others – their acknowledgement that the widespread thought processes to which we refer, too often involves fear, suspicion and mistrust which are allied to various human and financial vested interests. This is a position that has resulted in an authoritarian close-mindedness: sadly a state that does not contribute to a desired constructive advance in science. A situation that is especially true at this time, when a significant advance in medical knowledge is (beyond doubt) the need.

It has been acknowledged by members of the profession, including the Chief Medical Officer, Department of Health, London, United Kingdom, there is "a need for new knowledge". The level of science which is required, exists presently beyond the 'Standard Model': the credibility of which has been corroborated by some of the most prestigious research organizations known to the scientific community – matters concerning which you have read within 'Section Two' of this White Paper.

SCIENCE REFLECTS of course A FOUNDATION BASED ON KNOWLEDGE AND EXPERIENCE. The introduction of new knowledge 'beyond the Standard Model' will require a new mindset. 'Section One' of this White Paper conveyed *in necessary detail* certain aspects of the various positions that have been adopted and applied up to this time – which have served to stall the progress that has been so urgently needed.

Many within the field of medicine have become more aware, there are matters which they do not yet understand. The NDM-1 abnormal gene, its mechanism and treatment, is

one such subject. Allied to which, millions of patients are dying needlessly each year from cancer and other serious health problems named within this 'Section Three'.

Various forms of maladministration (which may yet be conveyed to amount to corporate manslaughter in some cases) means that a rising number patients will die needlessly in the event that certain attitudes within our human society are allowed to prevail, especially where drug and antibiotic resistance, NDM-1, and cancer are concerned.

Prior to providing a detailed description for the biophysicist, an outline follows which some readers may find useful.

Double-stranded DNA contains the genetic data for many organisms, although some data is carried by double or single-stranded RNA e.g. bacteriophages and many viruses.

The human genome contains approximately 3 billion 'base pairs', packaged into 23 chromosomes. Most cells are diploid with 23 pairs of chromosomes from each parent, giving a total of 46 chromosomes. [Haploid germ cells contain only half of the complete set of chromosomes.]

In order to understand the <u>mechanism</u> associated with the NDM-1 abnormal gene, the reader has to comprehend certain important new physics which, at a fundamental level, are beyond the Standard Model.

Within the medical and/or scientific fields, scientists require precise written information to be placed before them. It is necessary in this case however, to depart from this convention, in order to provide the reader with tight contextual accuracy that reflects the advance in fundamental physics.

The detailed knowledge throughout this 'Section Three' has been prepared in such a manner as to provide readers from a variety of backgrounds to understand the new physics. To this end:

- (a) Black typeface indicates knowledge that is already within the Standard Model.
- (b) Blue typeface indicates nuclear medical physics beyond the Standard Model.

The reader is required to familiarize themselves with the knowledge and understandings contained within 'Section Two', as well as 'Section Three' prior to and including this page. ['Section One' provided suitable information for readers, associated with resistance experienced when seeking publication of essential new knowledge beyond the Standard Model.]

Some facts that are relevant to the understanding of tissue which is normal, abnormal, drug resistant or infected by NDM-1.

i) The SPEED of the 'displacement-in-time' of the electric particle 'field energy' of atoms comprising living tissue, is critical to human health. NORMAL ATOMS comprise of electric particle 'field energy' wherein the latter speed is that of light c. In instances where the atoms of living tissue have become ionized (i.e. have lost

electrons and thereby, the data these carried – or the information carried is other than normal, because the atoms include data from an inherited abnormal gene – the 'field energy' speed is NORMAL. In each of the latter two instances – it is the data that comprises the tissue which is abnormal, and not the electric particle 'field energy' speed. [The frequency of the electric particle 'field energy' associated with the atoms comprising NORMAL human tissue, is recorded by the *Trimprob Scanner to be 1350 megahertz (see page 61).]

ATOMS THAT ARE FORMED BY AN ABNORMAL 'FIELD ENERGY' SPEED, result from exposure (under the influence of drugs) to the otherwise natural protection of DNA to slower moving 'radioactive' radiation: the effect of which is to erode the electric particle 'field energy' speed of DNA atoms associated with the biological system. Read please now again the vitally important confirmation of information stated on page 61, reproduced here ~ "THE TRIMPROB SCANNER can detect a variation in electromagnetic wavelengths between healthy tissue and cancerous cells. Using a beam of microwaves that vary between 400 and 1350 megahertz, when the electromagnetic signal comes into contact with biological tissue, it causes the cells to resonate at certain frequencies. Radiosensitive tumours generate a strong interference at around only 400 megahertz. Healthy cells, and tumours that are radioresistant, resonate at 1350 megahertz."

ii) TOXIC CHEMICALS ARE *in varying degrees* HARMFUL TO LIVING TISSUE: those which are most toxic are described as 'carcinogenic'.

The mechanism associated with the harmful effect – manifests either:

- (a) in a carcinogen form, or
- (b) more commonly by way of a similar 'collective effect' introduced over a period of time by a number of less toxic chemicals.

[In the case of either (a) or (b) – and in line with the greatly varying levels of toxicity involved – erosion takes place gradually associated with the natural defence of atoms against the distortion caused by radioactivity upon the data comprising DNA and/or RNA.]

THE GENERAL POSITION: **DNA** and **RNA** are enabled to decode and recognize chemicals which are non-toxic to healthy tissue. Nature provides however a natural protection against chemical data which decodes as foreign: the implications of the latter state continue to apply, until or unless the protective mechanism against chemical data becomes eroded to such an extent, the accumulation of foreign data becomes overwhelming to the DNA or RNA.

That is to convey – WHILE THE ABOVE PROTECTIVE MECHANISM REMAINS VIABLE, low-level toxicity continues to erode (usually slowly over a period of time) the 'natural defence' carried by the electric particle data of a portion of the base pair atoms. In each instance where a sufficient impairment of the natural defence of these atoms has taken place: the 'field energy' of the displacement-in-time of the relative subatomic data, will have become exposed to the slower moving electric particle 'field energy' of (usually) low-level radioactivity within the natural

environment.

<u>The effect of exposure to radioactivity even at low-level</u> – is to distort the electric particle data carried by the DNA and/or RNA. An example of the mechanism concerned is indicated within item (b) page 61 forward where, in the case of radiosensitive cancer cells – the frequency of the electric particle 'field energy' is not the 'normal' level of 1350 megahertz associated with healthy tissue, but a frequency of only 400 megahertz associated with radiosensitive pathogen cells. [NOTE please by way of example, that up to 95 per cent of primary cancers are radiosensitive – 5 per cent or more are radioresistant.]

Any slowing of the DNA/RNA subatomic electric particle 'field energy and thereby the frequency of electric particles per second – will be followed *always* by the propagation or replication of electrically abnormal pathogens. These are the agents of disease which the medical profession acknowledge to be either difficult or seemingly impossible to treat.

Electrically abnormal pathogens take the form of cells, proteins, bacteria, viruses, or genes – including the NDM-1 abnormal gene and the electrically abnormal enzyme this specific abnormal gene generates.

- iii) Summarizing by way of a précis which needs *ideally* to be at the forefront of one's understanding, when comprehending the nature and mechanism of NDM-1 and NDM-4.
 - (a) **Normal atoms** comprise of electric particles displaced-in-time with a 'field energy' that is operating at the speed of light c.
 - (b) The atoms of radiosensitive electrically abnormal pathogen cells, proteins, bacteria, viruses and genes including the NDM-1 abnormal gene and the electrically abnormal enzyme it generates are comprised individually of electric particles displaced-in-time with a 'field energy' that is operating at less than the speed of light c. The electric particle data of which is thereby distorted and out of sync with the electromagnetic spectrum, including of course the biological systems operating at the normal particle 'field energy' c.
 - (c) The atoms of radioresistant abnormal pathogen cells, proteins, bacteria, viruses and genes comprise of electric particles displaced-in-time with a 'field energy' that is operating at the normal speed of light c.
- iv) RADIOSENSITIVE **implies an abnormal pathogen** that <u>will respond remedially to an appropriate treatment</u> with electric particle 'field energy' at the speed of light *c*. The latter a process which elevates the slower moving electric particle 'field energy' of the radiosensitive pathogen, to the normal speed of light *c*: this enabling the DNA or RNA to recognise the original structure of the pathogen as foreign, and thus mark the pathogen for destruction by the immune system.

A fully restored DNA will then function normally and therefore is operating at normal electric particle 'field energy' c. It is now radioresistant.

RADIO<u>RESISTANT</u> in the case of **an abnormal pathogen** – implies a pathogen which results from ionization-induced genomic instability, or an inherited abnormal gene.

<u>Ionization-induced cells</u> are known to respond remedially to Electron Replacement Therapy (ERT). For ERT treatment – the reader is invited to refer to <u>Supplementary 'Reference' Information 14</u> within the pages 145-147).

THE FORMER RADIOSENSITIVE CRITERIA, APPLIES ALSO to the NDM-1 electrically abnormal gene. Suitably detailed knowledge concerning the NDM-1 abnormal 'resistant gene' and *thereby* the 'electrically abnormal' enzyme which this genomic agent generates, is to be provided within the general subject matter that is to follow.

[May we add: at the present time we are aware of no treatment for radio<u>resistant</u> abnormal <u>pathogens</u> which are <u>propagated or replicated consequential to an inherited abnormal gene</u>. We are however in a position to indicate a pathway of research, concerning which we lack the facility to investigate further at this stage.]

There follows an outline of the 'MEDICAL PHYSICS' associated with the NDM-1 abnormal resistant gene and the resulting electrically abnormal enzyme.

A number of aspects of the underlying science will (of necessity) be found to be a reiteration of parallel matters commented on elsewhere within 'Section Two' and 'Section Three' of this White Paper. By the this form of presentation, we seek to provide tight contextual accuracy for members of the medical profession, whose knowledge of physics is limited and may be helped by a suitable level of support.

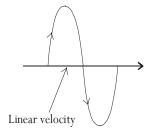
- a) Living tissue and matter in general, is formed by atoms comprised of component parts. The three larger components of atoms in general, consist of PROTONS (formed by fractional electric charges having a value equal to +1 Unit of Charge), NEUTRONS (which comprise fractional electric charges equal to a Neutral Charge), and ELECTRONS (which are formed by *fractional electric charges equal to -1 Unit of Charge). [*The 1998 Nobel Prize in Physics provided a helpful indirect confirmation of an earlier prediction we had made, to the effect the electron is comprised of fractional electric charges. Please see below.]
- b) Protons, neutrons and electrons are known to this Partnership to comprise an immense number of ultra-minuscule fundamental (gravity) photons. Additional information can be found on pages 19-21 of 'Section Two' of this White Paper, including independent supporting evidence.

Here below we summarise the essential knowledge.

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The proton is comprised of 2.2674 \times 10^{23} fundamental (gravity) photons (fgphs). The neutron is " 2.2705 \times 10^{23} " " " " " . *The electron is " 1.2349 \times 10^{20} fgphs: please refer also to item 22. pages 149-150.
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c) **Each fundamental** *gravity* **photon** (*fgph*) has an ultra-minuscule fractional electric charge that **carries specific data**, which is displaced-in-time within a waveform that comprises the profile of a wavelength: *the reader is invited to please refer to the illustration we provide next*.

THE DATA of the *fgph* is carried electrically, within the 'linear velocity' indicated in the following diagram.



An **electrically normal** wavelength operates with a 'field energy' at the speed of light *c*: such a waveform is thereby insync with the electromagnetic spectrum. Atoms which comprise the cells of normal tissue or an abnormal radio<u>resistant</u> pathogen, are electrically normal in their 'field energy' speed.

Those atoms that comprise radio<u>sensitive</u> pathogens, operate with a 'field energy' speed which is <u>less</u> than c: *i.e.* they have a 'field energy' speed which is slower than 299,792,458 metres per second. In all such instances the DNA and/or RNA data has been distorted by radioactivity (usually of low-level within the natural environment) and **is electrically abnormal.** Such an electric particle state is out-of-sync with the electromagnetic spectrum and thereby the atoms of tissues operating at the speed of light c.

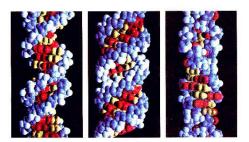
Radiation is formed by fundamental photons — each photon carries the characteristic associated with the nature of the radiation. The photon will be displaced-in-time at the speed which is natural to the radiation concerned. That is — at the speed of light c, if radiation is from the sun: otherwise the radiation will be radioactive which *in all instances* operates at less than c.

d)

LET US CONSIDER NEXT –
THE ATOMS COMPRISING specifically
THE BASE PAIRS and their relationship to the propagation of genes.

Within the illustrations below –

The blue and white images *are intended to indicate* sugar-phosphate atoms, the red atoms '*indicate*' the G-C base-pairs, the yellow atoms '*indicate*' the A-T base-pairs.



The atoms which comprise the base pairs, combine to form the basis for Watson and Crick's model of DNA – aspects of which are depicted here above.

MEMBERS OF THE SCIENTIFIC COMMUNITY HAVE SINCE SOUGHT TO PERCEIVE the difficult task of understanding –

the manner by which the complex and finely tuned 'electric particle data' is carried by the base pair atoms.

NUCLEOBASES -

are a group of nitrogen-based molecules that are needed to form nucleotides, the basic building blocks of DNA and RNA.

The nucleobases are responsible for the molecular structure for the hydrogen bonding of complementary DNA and RNA strands, which are vital components in the formation of stable DNA and RNA molecules.

THE HUMAN GENOME PROJECT -

has been involved in the production of a series of descriptive maps of each human chromosome, the mapping of which has comprised divisions of the chromosomes into smaller fragments and the mapping of these to correspond to their respective locations on the chromosomes. This completed – the next steps were to determine the base sequence of each of the DNA fragments, and ultimately to find all of the genes in the DNA sequence. Their mapping of the genome has described the order of genes and other markers, also the spacing between these on each chromosome. Geneticists are so far reported to have charted the approximate positions of over 2300 genes.

- e) Before examining the vital new science which is to follow: we are to summarise aspects of the present position, as seen by the medical profession across the world.
 - (i) Subsequent to the failure of other antibiotics, carbapenen antibiotics became the most powerful in use for the attempted treatment of highly resistant bacteria.
 - (ii) The $bla_{\text{NDM-1}}$ gene responsible for the New Delhi metallo- β -lactamase (NDM-1) enzyme passes on resistance to the carbapenem class of antimicrobial drugs. The resistance factor is associated with an ease of transfer among different types of bacteria: the enzyme is carried by a plasmid a snippet of portable DNA, that can be transferred to other species of bacteria.
 - (iii) The enzyme transfers resistance to E.coli and Klebsiella. The Lancet Study NDM-1 New Delhi Water Supply indicated eleven new species of bacteria carrying the NDM-1 gene were found, including strains that cause cholera and dysentery. A total of twenty strains of bacteria were found in samples, twelve of which carried *bla*_{NDM-1} on plasmids.
 - (iv) The acknowledged rise in antibiotic resistance, including the emergence of NDM-1, has for sometime been seen to be linked to the overuse and misuse of antibiotics. A practice reported to be widespread in many parts of the world, especially on the Indian sub-continent.

(v) There exists an absence of antibiotics to combat NDM-1, the spread of which is potentially very serious and worldwide.

THE QUESTION ARISES – what is required in the last resort?

The need is shown for new knowledge, springing from a more profound understanding of the fundamental nuclear processes of the underlying biological systems.

Section Two of this White Paper (pages 19-47) summarizes some of the most advanced new scientific knowledge, coupled with independent corroborating scientific evidence in support from some of the most prestigious research organizations known to the scientific community. This knowledge therein (and evidence in support within pages 27-40 indicated to the principal author of this White Paper, how critical to medicine was the subatomic 'field energy' of the speed of light c. Insomuch as it has been shown and proven, if or when the universal 'upper limit' to the speed of light becomes impaired, entire galaxies can and already have departed from the dimension-in-time of our universe. [A vital corroboration stated page 31.]

There is no reasonable doubt this reflects reality. From such a truth it is understood that abnormal <u>subatomic</u> 'field energy' speeds associated with electrically abnormal pathogens, would pose treatment problems indicated below and requiring advanced scientific medical solutions.

f) CRITICAL TO THE NORMALITY OF A CELL, PROTEIN, BACTERIUM, VIRUS, and especially EACH CHROMOSOME AND GENE, is the speed at which the electric particle data is displaced-in-time.

The 'field energy' displacement-in-time appertaining to atoms and therefore the data carried by normal base pair atoms, is 299,792,458 metres per second: which is equal to the speed of light c in a vacuum. RADIOACTIVITY-INDUCED ELECTRIC PARTICLE 'FIELD ENERGY' operates within a standing wave, at a speed which is <u>less</u> than c

The 'field energy' displacement-in-time of electrically abnormal base pair atoms, is <u>distorted</u> by radioactive-inducement: which has the effect of slowing down the electric particle 'field energy' speed to less than that of light c.

[We remind the reader: radioactive ALPHA particles comprise of electric particles with a 'field energy' speed which operates at 5-6% of the speed of light c. BETA particles operate mostly at 99% of c – sometimes a little less than this. GAMMA ray particles operate so close to the speed of light, that not until recently has it been confirmed their speed (by an ultraminuscule margin) is less than the speed of light c: hence it has the characteristic of being radioactive - (please refer to item 23. on pages 150-51).]

'Field energy' refers to the region in which a force is effective (gravitational field, electromagnetic field). However it is to be noted:

(i) Electrons in a wire are slowed by the composition of matter through which the current is flowing: the 'field energy' remains however constant at the speed of

<u>light</u> *c*.

(ii) Light when travelling through water is slowed: the 'field energy' remains constant at the speed of light c. The water content of the human body varies. Babies are said to be 75-80% water – women 50-60% and men 60-65%. The human brain is about 85% water, and our bones 10-15%.

[Atoms are known to vibrate, indicating the presence of a standing wave. As stated: electric current in a wire or water moves comparatively slowly, while the 'field energy' remains constant at the speed of light c. The movement of electric particle energy within the subatomic structure of atoms comprising normal healthy living tissue, is parallel in state.]

g) A summary of the relevant mechanisms.

WHEN THE DATA ASSOCIATED WITH SPECIFIC BASE PAIR ATOMS HAS BEEN DISTORTED, as a result of exposure to the slower 'field energy' speed of radioactive particle 'field energy' (usually) within the natural environment — an abnormal electric particle state is created.

The above is the result of an *erosion of the natural protection of atoms which comprise specific base pairs of living tissue, which is consequential to either

- a) the toxicity of a carcinogen, or more commonly –
- b) the long-term build up of the 'collective' effect of a number of chemicals of lower toxicity.

The referred to *erosion will be a consequence of the reality, that neither DNA or RNA is able to recognize chemicals which are unnatural to the body. The DNA/RNA can become harmed, if or when the level(s) of unnatural data reaches such a level:

- i) the 'former natural protection' (against usually low-level radioactive electric particle 'field energy') becomes overwhelmed, by the extent of the growth of data which is foreign to the DNA/RNA.
- ii) In the absence of the former natural protection: a specific number of the base pair atoms will become exposed to low-level radioactive particle 'field energy' within the natural environment. This will result in the slower moving radioactive electric particle 'field energy' becoming 'averaged in speed' and thereby interrelated with the former normal electric particle 'field energy' of the base pair atoms which previously had been operational at the speed of light c.
- iii) The resulting 'averaging out' of the two 'different field energy speeds' will cause a **slowing down** of the displacement-in-time of the data, which is carried by the electric particle 'field energy' of the DNA/RNA base pair atoms (*referred to above*). **These base pairs are now radioactivity-induced** which is the characteristic of an electrically abnormal pathogen cell, protein, bacterium, virus, chromosome, and/or gene.

NOTES: the genes are DNA sequences that instruct cells to produce specific proteins, which in turn determine traits. Chromosomes are strings of genes. A change in a gene's DNA sequence is a mutation. [DNA stores the genetic data: RNA uses the data to assist a cell to produce a protein in mammals.]

The slowing down of the electric particle 'field energy' speed ,will have the effect of distorting the data (information) carried formerly by specific base pairs within the DNA and/or RNA.

- iv) The bla_{NDM-1} gene responsible for the NDM-1 enzyme will have become radioactivity-induced by the former mechanism, and will
 - (a) Increase the capacity for 'resistance' to the carbapenem class of antimicrobial drugs, by the mechanism involving –
 - (b) The transfer of electric particle 'field energy' at a sub-normal 'field energy' speed. The latter 'electrically abnormal resistance' factor is associated with an ease of transfer to different types of bacteria. The enzyme responsible for NDM-1 is carried by a *plasmid: a snippet of portable DNA that can be transferred to other species of bacteria. [*A plasmid is a small circular double-stranded DNA molecule which is distinct from a cell's chromosomal DNA. Plasmids exist naturally in bacterial cells and they occur also in some eukaryotes, Genes carried in plasmids can introduce bacteria to genetic change such as antibiotic resistance.]
 - (c) Plasmid transfer can be treated by electroporation methods: or plasmids can be transmitted to blood-borne organisms, in which case an appropriate blood treatment can be effective as referred to from page 127 forward.] We are to also specify 'new equipment' for a more general use: pages 46-7 item (v) b, & item 4. pages 130 forward.
 - (b) **Electrochemotherapy** (page 148 Ref.15) involves the use of electric particle 'field energy' at the speed of light c, which is the active process of treatment. [In the case of Photodynamic Therapy where the electric particle 'field energy' of 'light rays' is applied, subsequent to the application of a light-sensitive drug to the tumour: convention has also thought the active ingredient to be cytotoxic.] **In the case of electroporation:** tests without the use of a cytotoxic drug will confirm, electric particle 'field energy' at the speed of light c is the active ingredient.
- v) THE FACTOR OF RESISTANCE is here explained.

Drugs and antibiotics operate *at subatomic level* with electric particle data which is <u>displaced-in-time at the speed of light c</u>.

Cells, proteins, bacteria, viruses, chromosomes and genes when induced with the characteristic of an ELECTRICALLY ABNORMAL PATHOGEN – operate *at subatomic level* with electric particle data which is displaced-in-time at <u>less</u>

than speed of light c.

ELECTRIC PARTICLE DATA when energized *independently* at <u>the above 'two</u> <u>different speeds'</u>, will interrelate to form an 'average speed' which is <u>less</u> than that of the speed of light c. In this abnormal electric particle state, the original data of the drug or antibiotic is distorted – the effect of which is observed to be one of resistance.

h) THE MECHANISMS associated with Photodynamic Therapy and Microwave Therapy has been given. [The mechanism of drug and antibiotic resistance, commences page 128.]

The reader will be aware from study of this 'Section Three', when electric particle 'field energy' has been applied to individual sections of living tissue, comprising specific forms of electrically abnormal pathogen – cancer is the most common form of an electrically abnormal pathogen – 'appropriate methods' of treatment have been shown by independent medical research teams to be effective in treating up to 95 per cent of such cancers.

By applying the identical medical physics – we have shown how cancer of the blood can be effectively treated (pages 110-111).

In order to understand the needs when treating NDM-1, consideration should be given also to certain other realities that apply. The proposed new medical equipment that is required in order to treat the NDM-1 abnormal gene/enzyme, will have wider applications: including the allied provision of a suitable whole body facility for the treatment of electrically abnormal pathogen cells, proteins, bacteria, and viruses.

1. On page 115 evidence confirmed – a "patient's blood grew NDM-1 Carbapenemase-producing Enterobacteriaceae".

Blood-borne radiosensitive cancers or other infections, can be treated appropriately: see item C on pages 110-111.

Bacteria that can transmit an electrically abnormal pathogen NDM-1 enzyme from one type of infection to another, requires treatment involving a 'whole body facility' utilizing an appropriate safe use of <u>electric current</u>.

<u>Independent medical and scientific evidence confirms</u> – when an **electro-poration-based treatment** was applied in vivo to cutaneous and subcutaneous tumours – **the application of electric particle 'field energy'** (at the speed of light c) proved to be an efficacious treatment, when applied to that which were effectively abnormal fundamental photons (fphs) comprising radiosensitive electrically abnormal pathogen cells.

(a) **During the referred to** *example of* *electrochemotherapy – short and intense pulses of electric particle 'field energy' were applied to tumour nodules in vivo, utilizing appropriate electrodes to electroporate transiently the membranes of cancer cells. *Supplementary 'Reference' Information (a) > item 15. page 147.

(b) AN IMPLICATION – in terms of the nuclear medical physics presented within this White Paper: **the above electroporation-based treatment** will have served to elevate the abnormal slower-moving subatomic electric particle 'field energy' of the radio<u>sensitive</u> fphs to the normal speed of light *c*. **This technique** *when completed efficiently* **would have introduced a normalization** of the former abnormal radio<u>sensitive</u> electric particle state of the fphs: thus enabling the DNA/RNA to mark the above pathogen cells for destruction by the immune system.

ANOTHER IMPLICATION concerns drug and antibiotic resistance. In cases where the pathogen is radiosensitive (i.e. other than ionization-induced, or, having resulted from an abnormal gene) and consequential to a suitable input of electric particle 'field energy' – a parallel improvement of the 'electric particle state' of such a formerly radioresistent pathogen, would take place. An appropriate treatment would need to be applied to the 'whole body', by means of new medical equipment designed for the purpose and concerning which we are to elaborate further within this Section of the White Paper.

The latter treatment would enable an efficient interrelation to be introduced between (on the one hand) the subatomic components of a multi-drug-resistant (MDR) pathogen (MDR TB is one example) and (on the other hand) the drug, to which the organism is 'resistant antibiotic'.

Compatibility would now exist in such a case. That is to convey: consequential to both the pathogen and the drug sharing the identical normal electric particle 'field energy' speed – both the pathogen and drug are now able to decode the electric particle data of the other.

3. The BACTERIA 'Carbapenemase Resistant Enterobacteriaceae' (CRE) kill up to half of the patients who suffer bloodstream infections. The Enterobacteriacea includes more than 70 species that live normally in the human digestive system (including E.coli). If or when these bacteria infect areas of the body (for example the blood or bladder) severe infections can occur. One CRE is Klebsiella pneumoniae – which is reported to have had a seven-fold increase in the United States during the last decade. In some States the disease is "now a routine challenge". The problems associated with superbugs are being acknowledged worldwide. Those which carry NDM-1 will be resistant to antibiotics.

The mechanism of drug and/or antibiotic data overload. [Is referred to briefly below in item (i) and thereon in paragraphs (ii) to (v) and to the end of page 129. Also page 134.]

(i) At a fundamental level, drugs are formed by electric particles consisting of data, which is carried by fundamental photons (fphs) displaced-in-time at the speed of light c. When a normal pathogen is thus formed – an appropriate drug and any 'normal' pathogen type can decode each another, thus resulting in effective drug action.

- (ii) When however the DNA/RNA associated with a pathogen suffers a drug and/or antibiotic data overload resulting from a build-up over a period of time of an excess of chemical proliferation the 'natural protection' provided by the DNA or RNA against the distorting influence of low-level radioactivity within the natural environment, can no longer be maintained.
- (iii) Exposure of the fphs which comprise a pathogen, to the slower moving electric particle radiation of *usually* low-level radioactivity within the natural environment, results in an abnormal displacement-in-time of the data concerned. The data of the pathogen *thus* becomes distorted.
- (iv) The normal 'field energy' speed of the electric particle data comprising a drug or antibiotic, cannot be read and is thereby 'resisted' by the slower displacement-in-time of the electric particle data which forms an electrically abnormal pathogen cell, protein, bacterium, virus, gene, or enzyme.
- (v) When a drug or antibiotic can no longer interrelate with a pathogen for the foregoing reasons the subatomic electric particle 'field energy' anomaly is termed presently by the medical profession as 'resistance'. The latter abnormal health condition can be shown to be amenable to a new form of treatment *outlined here below*: we refer to a method which is presently a need *also* in cases where a 'whole body' treatment is required for the treatment of certain radiosensitive health conditions.

NEW MEDICAL EQUIPMENT is required with some urgency. We refer to medical equipment which is designed to provide an appropriate capability to energize *safely* the 'whole body' with electric particle 'field energy' at the speed of light *c*, where this is needed for the treatment of a number of specific diseases and health conditions.

It will be necessary to elevate (to the normal speed of light c) the electric particle 'field energy' speed of living tissue which is contaminated by electrically abnormal pathogens. These can take the form of radiosensitive cells, proteins, bacteria, viruses, chromosomes, genes and/or the NDM-1 enzyme. The electrically abnormal particle 'field energy' speed of these pathogens will have resulted from a distortion caused by the slower moving electrical 'field energy' of low-level background radioactivity within the natural environment. The latter being a consequence of chemical proliferation (over a period of time) resulting in the propagation or replication of specific abnormal DNA/RNA data: this taking the form of an electrical distortion of the data carried by fphs. In such cases — a 'whole body' treatment will prove to be the only practical and efficient means of influencing and treating suitably, the electrically abnormal pathogens infecting individuals among the several millions of patients worldwide, who are presently in urgent need of such a nuclear physics-based treatment.

The proposed NEW MEDICAL EQUIPMENT would effectively apply the same efficacious medical physics to every region of the body of a patient, who is suffering from any form of electrically abnormal pathogen which is dissipated in minute forms throughout the body. The reader in this respect is referred to 'TEMPERATURE LIMITS' on page 131. [Note: an advisory 'safe limit' to the heat generated when applying electrical energy to 'brain cells', is 39.2°C.]

4. **Drug and Antibiotic Resistance is developing into a 'significant problem', worldwide**. The knowledge presented within this section of the White Paper presents the desirability of the proposed new medical equipment – in order to provide a *suitable 'whole body' treatment and to meet drug and antibiotic resistance in general, in addition to cases involving NDM-1.

*A number of major diseases should be treated with the proposed new equipment. The diseases to which we refer include those named on pages 112-114, 133, 135-136, and 139, which we supplement with the following information:-

Common radiosensitive Cancers are already being treated successfully via Microwave Therapy and Photodynamic Therapy. However cancer in the form of leukaemia, lymphomas, and sarcomas – require a 'whole body' treatment, which the proposed 'new medical equipment' would provide. The latter equipment should be designed to provide *also* a facility whereby, an appropriate focus of electric particle 'field energy' at the speed of light *c* can be directed specifically upon cancers such as those which are cervical, endometrial, uterine, ovarian, and pancreatic. [Referred to page 139.]

H1N1 in its 'more severe' form, H5N1, and H7N9 (which has shown signs that it is able to jump more easily from birds to humans than H5N1) and SARS-like infections are, in the understanding of this Partnership, likely to respond positively to treatment with the proposed 'new medical equipment'. [H5N1 has so far killed up to 60% of those infected.] There exists a grave potential for a human to human mutation, which would result beyond any doubt or reservation in a global pandemic. The H7N9 virus is reported to take on a variety of forms. {Ref: medicalxpress.com > Diseases, Conditions, Syndromes.

Resistant Tuberculosis: Margaret Chan, Director-General of the World Health Organization has indicated that "among the world's 12 million cases of tuberculosis in 2010, WHO estimates that 650,000 involved multidrugresistant TB (MDR-TB) strains. Treatment of MDR-TB is extremely complicated, typically requiring two years of medication with toxic and expensive medicines, some of which are in constant short supply. Even with the best of care, *only* slightly more than 50% of these patients will be cured."

THAT IS UNTIL the medical equipment' proposed within this White Paper has been suitably developed, tested and made available worldwide. A subject

matter which reflects a vital and most urgent need of this time.

The same applies to all diseases that already have, or yet will become, resistant to drugs and antibiotics.

TEMPERATURE LIMITS. The 'temperature' of living tissue – where generated by the use of electric current, **needs to be limited:**

- (a) Where an application including the brain is involved, the advised limit should be restricted to 39.2°C. [Refer to upper 'safe limit' page 78.]
- (b) For *all* other parts of the body, it would be prudent for the 'treatment temperature' to be maintained at 43-45°C.

The latter 'Temperature Limits' have been corroborated medically by independent trials, and suitably reported on within the context of the treatment of electrically abnormal Cancer cells within this 'Section Three'. [Where temperature is concerned: the factor of 'saturation and temperature' applies to all forms of disease, irrespective of whether the electrically abnormal pathogen is a cell, protein, bacteria, virus, chromosome or gene.]

It would be in the interest of medical science and patients, for an exchange of knowledge to be arranged to discuss the design, manufacture and testing of suitable medical equipment for treatment of the 'whole body'. [This Partnership is non-profit making and has no financial vested interests. If considered necessary, we are prepared to become of charitable status, or under the wing of an existing suitable charity.]

The suitable manufacturer(s) will enjoy the advantage of a considerable level of interest worldwide on behalf of governmental health departments, hospitals and clinics. [Bearing in mind the problems facing the pharmaceutical industry where drug and antibiotic resistance is concerned, it would be prudent for a number of such firms to diversify (under licence) in this connection.]

APPROPRIATE MEDICAL EQUIPMENT may then be used for the treatment of radiosensitive Leukaemia, Lymphomas, Sarcomas, also cervical, endometrial, pancreatic, uterine, and ovarian cancers. The serious health problems including AIDS, Alzheimer's disease, vCJD, Motor Neurone Disease, Multiple Sclerosis, Parkinson's disease, drug and antibiotic resistance including NDM-1, advanced forms of H1N1, also H5N1, H7N9 and SARS-like infections could also be treated.

Sceptics may wish to ask, are we indicating a universal panacea?

Each of the above health problems ARE associated with an electrically abnormal pathogen cell, protein, bacteria, virus, chromosome, gene or enzyme – serious health conditions which <u>are</u> treatable. THERE IS A LACK OF KNOWLEDGE within the medical profession, concerning certain aspects of nuclear medical physics beyond the Standard Model. The evidence and efficacy of the independently trialled treatments which have been reported herein, speak clearly enough for interested parties: there will be also those who will deny or doubt the knowledge presented,

irrespective of the detailed evidence to the contrary, both medical and scientific.

'Antibiotic resistance' is a huge problem. Some of the drugs used to treat urinary tract infections, are failing as a result of 'bacterial resistance' to medications that have increased by more than 30 per cent during the past 13 years. According to Centres for Disease Control and Prevention: urinary tract infections caused by E.coli bacteria, account for more than 8.6 million visits to healthcare professions each year in the United States of America alone. Untreated, these infections can result in lifethreatening bloodstream infections. The scale of the problem worldwide is potentially immense.

The widespread and on-going concentration of research on <u>symptoms</u> instead of the <u>underlying cause</u>, continues to take up much time and has not produced a cure for the diseases concerned. In this respect, we are in a position to comment further:-

It is appropriate for the reader be reminded of a vital issue mentioned on page 52, with respect to which we now return and suitably extend. THE PRINCIPAL AUTHOR OF THIS WHITE PAPER (together with Television Producer and Director A. T. C. Ahsmann) WERE INVITED TO ATTEND the 'IXth International Workshop on Radiation Damage to DNA' May 13-17, 2006, Tekirova, Antalya, Turkey. During this 'Workshop', more than forty research scientists presented their expertise.

As listeners on that occasion, one hoped to hear reference to the underlying cause of cancer: however and without exception, the research findings were confined to study of the 'symptoms'. I ENQUIRED privately OF TWO SPEAKERS – "If I was your doctor and we discussed the treatment for a cancer: would you desire me to treat the cause, or the symptoms?" Each replied immediately, "I would wish you to treat the cause". At one stage during the 'Workshop', a well-known physicist from the United Kingdom expressed the following viewpoint to the author of this White Paper – "I have to agree with you. We should be discussing the underlying cause".

A question however remains: was the fundamental underlying cause known to more people than the author of this White Paper and Heidi Ahsmann, who were in attendance during the International Workshop? Cancer is certainly the most common of the diseases which causes death among patients. By what criteria may one be certain, that the underlying cause and treatment has yet to be understood by the establishment? Enquiries in this respect will confirm the following guidance to be well-founded.

At the time of writing – 2012 was the last year for which the World Health Organization has given a total for the number of deaths from Cancer worldwide: the total was 8.2 million. To the logical mind, these figures fall short of confirming the underlying cause and treatment of Cancer is understood by the establishment. If one adds to the latter figures, the loss of lives each year from other diseases named within this White Paper – which the profession acknowledge to be either difficult or 'seemingly' impossible to treat – and couple these with potential deaths in the future from drug and antibiotic resistance (including NDM-1): then with wisdom one understands, there needs to be an adjustment to some attitudes of mind: also a suitable level of common sense applied to the carefully considered contents of

the document which the reader has now before them.

TO SUMMARIZE. **The underlying development of normal healthy tissue** needs the DNA and RNA, to be encoded to propagate or replicate the full range of normal healthy components of living tissue. To enable this to take place, the atoms forming the DNA/RNA base pairs have to be displaced-in-time at the speed of light *c*. For most people and most of the time, the correct displacement-in-time is in place.

The subsequent underlying development of RADIOSENSITIVE tissue, will contain one of the following electric particle states – 'electrically abnormal' cells, proteins, bacteria, viruses, or *for example* the NDM-1 resistant gene/enzyme. Each of these pathogens carry the abnormal electric particle 'field energy', which comprises the 'base pair' atoms of the DNA and/or RNA that have been exposed to low-level radioactivity (usually) within the natural environment. The latter electric particle state, will be as a consequence of the build-up effect on the DNA/RNA of toxic chemicals – this resulting in the introduction after a period of time of the commencement of a serious health problem, due to a carcinogen or more commonly the collective effect of a number of less toxic chemicals.

When this is taking place; the electric particle data carried by each fundamental photon during its inducement, becomes slowed down in speed consequential to:

- (i) an <u>averaging</u> of the former electric particle data (which had been displaced-in-time previously at the speed of light c) with –
- (ii) <u>the slower moving electric particle radioactive 'field energy' existing</u> within (usually) the natural environment.
- (iii) This causing a distortion of the original *normal* electric particle data, that had been propagated by the DNA or replicated by the RNA.

It will be apparent when the latter position occurs: the distortion which takes place is limited at any one time to a relatively small number of 'base pair' atoms. This is reflected by the reality that is widely known – whereby a patient is seen to suffer (*in most instances*) one (*and not several*) of a potential number of diseases, that can develop as a consequence of the above distortion of data within the DNA and/or RNA. [The foregoing being an aspect of the mechanism, which results in the propagation or replication of an electrically abnormal pathogen.]

The above pathogen will be in the form of an electrically abnormal cell, protein, bacterium, virus, chromosome, gene or enzyme. Cases of such health problems include AIDS, Alzheimer's, Cancer, vCJD, Motor Neurone Disease, MRSA and certain other hospital acquired infections, Multiple Sclerosis, and Parkinson's disease. A parallel mechanism will be found to apply to the more severe mutation of H1N1, also H5N1 and H7N9.

*NOTE. The above mechanism may apply *also* to Muscular Dystrophy (*a severely abnormal dystrophin protein*): likewise BSE. In addition, vCJD (*an abnormal PrP protein*) which the Partners have so far lacked an appropriate opportunity to

research, and which is almost certainly treatable based on information within this White Paper.

WHEN A GENE IS AFFECTED, then the gene product may give rise to life-threatening conditions: as is the case with NDM-1, that confers antibiotic resistance on many bacteria.

KNOWLEDGE OF GENES and certain relevant matters arising –

Each gene comprises electric particle data, associated with a specific number of the base pair atoms. Every 'base pair atom' is formed by fundamental photons, each one of the latter comprising a waveform – the purpose of which is to displace-in-time, specific electric particle data associated with the activity of each fundamental photon.

[INFORMATION. Massachusetts Institute of Technology (MIT) indicated on their website October 29, 2004 – that a team of more than 2,800 scientists (*including several from MIT*) had published a scientific description of the human genome. Sequencing of the human genome reduced the estimate of the number of protein-coding genes from 35,000 to 20 - 25,000.]

1. THE SPEED AT WHICH THE DATA IS DISPLACED-IN-TIME, is critical to the normality of a cell, protein, bacterium, virus, chromosome and GENE.

In normal instances the data associated with a gene, is displaced-in-time within a standing wave at the normal 'field energy' speed of 299,792,458 metres per second (*i.e. equal to the speed of light c in a vacuum*). [At this speed **the data is normal** with two exceptions *i.e. where the data is abnormal but* not due to an incorrect speed. The two exceptions are (i) where an aspect of the DNA/RNA has become ionized (resulting in a loss of the data of some electrons'): (ii) where the DNA/RNA incorporates the formation of an inherited abnormal gene.]

NDM-1 is a radio<u>sensitive</u> pathogen: the outcome of an electrically abnormal 'resistant gene' – associated *in turn* with an **electrically abnormal enzyme** which confers 'resistance' to antibiotics. The mechanism of drug and/or antibiotic data overload is conveyed within page 128 of this 'Section Three'.

2. The reader who has considered from page 106 forward, will have received the opportunity to read and understand the **mechanism associated with 'Drug and Antibiotic Resistance' in general**. It is appropriate from the readers' standpoint: the following knowledge should also be provided.

This Partnership produced a report entitled 'Medical Science is in Crisis, Worldwide' by Robert Wood-Smith in the Spring of 2008, which was presented to Sir Liam Donaldson, Chief Medical Officer, Department of Health, London, United Kingdom, and subsequently by invitation to the World Health Organization in 2011. Page 15, item 3d, contained the following prediction:-

"'Antibiotic resistant' infectious diseases present a significant threat to medical services worldwide."

"A VITAL AND NECESSARY UNDERSTANDING OF THE SCIENTIFIC UNDERLYING CAUSE OF ANTIBIOTIC 'RESISTANCE', reflects issues of the greatest importance to the medical research community ~ members of which will need a change in 'mindset', before those concerned may commence to comprehend the physics. There will be a need for the gift of a logical mind; a genuine desire to serve the needs of the profession and its patients; coupled with a realization that 'new scientific knowledge' is a most vital need of this time."

"Professor Paul Davies, within the Preface to his book 'About Time. Einstein's Unfinished Revolution', commented with respect to the scientific community and people generally "we are far from having a good grasp of the concept of time." Members of the medical profession will need to comprehend 'time' and the relative 'medical science' associated with the abnormal electrical 'displacement-of-energy-in-time', that is the underlying cause of 'electrically abnormal pathogens'.

- 3. **In a study published September 2011:** researchers from the Medical Research Council (MRC) study at the Research Complex at Harwell, England, indicated they had determined the structure of NDM-1 enzyme a crucial step when seeking to comprehend how the enzyme works and how best it could be counteracted. Professor Simon Phillips (Director) said: "NDM-1 is a serious threat to human health. The enzyme it carries is able to degrade many forms of antibiotic and render them useless." "In addition, the gene for NDM-1 can be passed between different bacteria and so can spread rapidly in the population and generate drug resistance in different diseases."
- 4. **The loss of antibiotics** has been described as "A loss of our last resort". Ironically, this awareness has resulted in a refusal by some to engage with the new knowledge. Close-mindedness, authoritarianism, and vested interest(s) has no doubt contributed to this phenomenon.

Prior to moving on to item 5: it is likely to be helpful for *some* readers, if we provide a summary associated with the following recent inputs.

- (i) This White Paper has indicated the relevant mechanism(s) when treating an electrically abnormal pathogen cell, protein, bacterium, or virus. The NDM-1 resistant gene will be found to have the state of an electrically abnormal pathogen. When the mechanism of the latter 'electric particle state' interrelated with a gene, the condition known as NDM-1 emerged: a life-threatening enzyme which makes bacterium resistant to antibiotics. [Concerning NDM-4: compared with that of NDM-1, the electric particle state of NDM-4 possesses increased hydrolytic activity toward carbapenems and several cephalosporins. NDM-4 differs from NDM-1 by a single amino substitution (Met154Leu): indicating that remote amino acid substitution might have a role in the extended activity of this metallo-β-lacamase. It has been reported that amino acid substitution was not located in the known active sites of NDM-1: indicating that remote amino acid substitutions may have a role in an extended activity of this metallo-β-lacamase.]
- (ii) On pages 124-126 commences a summary of the 'relevant mechanisms'. See especially item g) page 125.

- (iii) **Item h) on pages 127-129** indicated THE MECHANISM associated with the treatment of an electrically abnormal pathogen, is relatively straight forward: specific aspects of which, this 'Section Three' conveys.
- (iv) Items 1. 2. 3. and 4 on pages 127 forward to the top of page 134, commented on Drug and Antibiotic Resistance in general prior moving on to indicate the need for a meeting between those parties who are interested in the design, development and clinical trial of suitable new whole body medical equipment. This in order to provide in the near future, appropriate and safe 'whole body' medical equipment for those patients who are suffering from the health consequences, directly associated with an electrically abnormal cell, protein, bacteria, virus, drug resistance, and increasingly important the NDM-1 resistant gene/enzyme.

Those who comprehend the foregoing are required to bear in mind, the growing and now urgent needs of Health Departments, Hospitals and Clinics, whose controlling personnel have understandably serious concerns for the problems facing the pharmaceutical industry, the medical profession, and its patients where drug and antibiotic resistance is concerned. A position which has reached the stage, where it would now be prudent for a number of pharmaceutical firms to diversify (under licence) to produce new medical equipment, that will enable drug and antibiotic resistance to be overcome and thereby enable otherwise efficacious drugs and antibiotics to once again be used to heal and save the lives of millions of patients across the world.

Page 131 provided knowledge under the heading of the 'Temperature Limits' to apply.

- (v) Within page 132 the statement 'without exception, the research findings were confined to study of the 'symptoms' indicated a hurdle, which has existed for many within the field of medical research.
- (vi) On pages 133-134 a Summary was provided.
- (vii) **Pages 134-135** (items 1. 2. 3. 4.) provided information under the heading 'KNOWLEDGE OF GENES and certain relevant matters arising'.
- (viii) Reference to a number of diseases which can benefit from a 'whole body' treatment, was provided on pages 112-114.
- 5. The best known applications of the knowledge within this 'Section Three', applies to Cancer. An electrically abnormal pathogen that accounts for in excess of 80% of the *approximately* 8,200,000 patients, whom the WHO indicate die worldwide from this disease annually.

In western countries, up to 95% of 'primary' cancers are (beyond doubt or reservation) 'electrically abnormal' radiosensitive pathogens', which are known to respond remedially to electric particle 'field energy' at the speed of light c. Independent medically trialled corroborations appertaining to the latter forms of treatment, have included:-

(i) THE UNIVERSITY OF LEICESTER 'microwave therapy' clinical trial – which involved nearly 100 patients and more than 200 tumours

(previously considered untreatable) – presented a new treatment which yielded a remedial success rate of 95%. [Microwaves are (of course) a frequency of electric particle 'field energy' at the speed of light c.]

THE TRIAL was carried out by **David Lloyd MBBS. FRCS(Engl). MD.,** Honorary Senior Lecturer in Cancer Studies, University of Leicester, Consultant Hepatobiliary and Laparoscopic Surgeon, Leicester Royal Infirmary, Leicester LE1 5WW, United Kingdom.

A SUBSEQUENT REPORT provided by the author of this White Paper and headed 'Microwave Therapy for the Treatment of Cancer', was prepared in receipt of a 'specific request' from Geoff L. Ridgway MD, BSc, FRCP, FRCPath, Senior Medical Officer, Infection Control & Blood Policy, on behalf of Sir Liam Donaldson when Chief Medical Officer for the Department of Health, London, United Kingdom. Within the significant detail of the report it was indicated – an estimated *five of the eight million Cancer patients worldwide who die from cancer each year, would benefit from an appropriate and knowledgeable introduction of this treatment. [*The estimated 'five' million, has since been adjusted to a potential 'six million lives may be saved each year' including the utilization where appropriate of PDT: comment on which follows in (ii).]

(ii) UNIVERSITY COLLEGE LONDON have presented their case for the treatment of a number of Cancer types by the use of **Photodynamic Therapy** (PDT): *i.e.* the use of a light-sensitive drug followed by irradiation with an appropriate frequency of light *itself*.

[During the nineties – when Robert Wood-Smith (subsequently author of 'Medical Science is in Crisis, Worldwide', 'Microwave Therapy for the Treatment of Cancer', and presently this White Paper) was corresponding with a scientist associated with the early development of PDT – the 'initial success rate' for that which was then at an 'explorative stage' for the treatment of non-melanoma skin cancer, was reported by a journal to be 94%.]

The NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE (NICE) has approved the use of PDT for the treatment of Cancers including skin, mouth, oesophagus, head and neck. University College London has shown the treatment is successful also for the treatment of lung cancer – a treatment advance that we advocate with confidence.

A TWO-PAGE published ARTICLE 'A ray of light can kill cancer cells without leaving terrible scars – so why are so few offered it?' by Jerome Burne – a medical journalist and respected contributor to 'Medicine Today' – drew attention to the very slow acceptance of PDT by many within the medical profession, while others with direct firsthand medical experience were presently frustrated by an underinformed establishment. [For a link to the article, please refer to Supplementary 'Reference' Information 16. on page 148 of this White Paper.]

- (iii) RADIOTHERAPY the employment of X-rays as a treatment for Cancer reflects a further medical example of electric particle 'field energy' irradiation at the speed of light *c* used as a treatment worldwide. The too ready acceptance of collateral damage to adjacent healthy tissue by powerful ionizing radiation could be avoided or much reduced, if the understanding of 'Electron Replacement Therapy' was put into practice. See <u>Supplementary 'Reference' Information</u> 14. on pages 145-147.
 - (a) The medical profession acknowledge, the 'average' success rate when using this form of strongly ionizing radiation treatment, is *only* in the region of 40%. The reason for this very limited result, reflects the damage to healthy cells within the close proximity of the tumour(s) under treatment and the likely propagation of new secondary tumours.

[Resulting from the ionizing effect of high frequency X-ray radiation – when electrons containing aspects of the data *carried formerly by healthy cells* become removed from tissue, this will result in the propagation by DNA of secondary cancer cells. Such cells will prove to be radio<u>resistant</u>, in that the atoms thereof will comprise of electric particle data operating at the speed of light c.]

- (b) Damage limitation in the case of radiotherapy, means the treatment of larger tumours has often to be curtailed. For this reason the 'average' success rate can be up to 55 per cent **less** successful, than the Microwave Therapy and Photodynamic Therapy treatments named within this item 5, items (i) and (ii).
- (iv) The primary matters raised so far within this item 5 has recalled for readers certain realities, that are known beyond any reasonable doubt.

Not all Cancers however can be treated by the three aforementioned medical techniques – such as Cancers taking the form of radiosensitive leukaemia, lymphomas, and sarcomas: these require a 'whole body' treatment which the proposed 'new medical equipment' would provide. The latter equipment needs to be designed to provide also a facility whereby – an appropriate 'focus' of electric particle 'field energy' at the speed of light c can be 'suitably directed' upon cervical, endometrial and uterine, ovarian, and pancreatic cancers, within those temperature limits stated on page 130, items (a) and (b).

THE PROPOSED NEW MEDICAL EQUIPMENT is required to be designed suitably to enable electric particle 'field energy' at the speed of light c to be delivered safely to the 'whole body' and will – from the allied standpoints of knowledgeable nuclear physics and medicine – allow a radiologist to consider independently:

(a) the treatment of those Cancers which are neither practical or best suited for treatment by any of the techniques referred to above under (i) (ii) and (iii). Eight examples of such Cancers

are named within the following item (c).

- (b) Cancers referred to in (c) also those other serious health problems which in addition are named in (c) each have an abnormal pathogen as their underlying cause. **In general terms**: up to 95 per cent of such cases, will prove to be a health condition associated with the atoms of an 'electrically abnormal pathogen' the latter comprising a radiosensitive abnormal cell, protein, bacterium, or virus.
- the Proposed New 'Whole Body' Medical Equipment may be used for the treatment of radiosensitive Leukaemia, Lymphomas, Sarcomas: and cancers including Cervical, Endometrial, Uterine, Ovarian, and Pancreatic. In addition: other serious health conditions which include AIDS, Alzheimer's disease, vCJD, Motor Neurone Disease, Multiple Sclerosis, and Parkinson's disease Drug and Antibiotic Resistance, including the NDM-1 gene/enzyme and emerging new viruses such as advanced forms of H1N1, H5N1, H7N9, and SARS-like infections.
- (d) The proposed new treatment will enable the DNA/RNA to become normalized and in a position to read the data associated with the 'original structure' of the abnormal pathogen as foreign, and thereby mark it for destruction by the immune system.

In response to the sceptics – we are presenting a new paradigm for disease, based on new knowledge of the fundamental properties of matter, particularly the speed of light and electric particle 'field energy' appertaining to living tissue.

- a) There is an underlying cause which in the case of each of the health conditions concerned is associated with the presence of an abnormal pathogen.
- (b) The advance in nuclear medical physics reported here, identifies 'electrically abnormal pathogens' which may be radiosensitive or radiosensitive.
- (c) Radiosensitive pathogens can be treated with electric particle 'field energy' at the speed of light c with up to 95% success rate.
- (d) Evidence is provided of successful treatment of radio<u>resistant</u> ionization-induced cancer pages 145-148 under <u>Supplementary 'Reference' Information 14</u>. A successful treatment of radio<u>sensitive</u> and partly ionization-induced cancer cells. [A 'dual' treatment (*photographic results are illustrated within this* 'Supplementary 'Reference' Information') indicating that the malignant melanoma pathogen is comprised of radio<u>sensitive</u> and radioresistant abnormal cells.

(v) Multidrug resistance, including the recently identified family of NDM-1 and NDM-4 producing organisms, is also amenable to the new treatment we describe, which may involve new 'dialysis' procedures page 110-111, or 'whole body treatment' – introductory information is conveyed within item D. on pages 112-114.

With respect, the Consultant would require to consider whether:

- (a) Electrical dialysis of the bloodstream indicated within item C on pages 110-111 would be suitable: or
- (b) Does the case present a need for utilization of a 'whole body' treatment, due to the widespread distribution of the infection?
- (c) If in any doubt and at the discretion of the Consultant: both (a) and (b) treatments may be used *in series* in support of the health condition of the patient.
- 6. **The subject of 'TIME'** is a factor which some find difficult to understand: the reader may refer to pages 143-144. We summarize for the non-physicist.
 - (i) Those electric particles which form 'wavelengths of light', take *on average* about 8 minutes 20 seconds to travel from the Sun to Earth: that is to convey, we observe the Sun as it 'existed in time' a little more than eight minutes previously.

Astrophysicists have observed images that have been carried by 'light waves' emitted from quasars which are 'billions of light years' away from Earth. By this means, scientists have been able to see an aspect of the universe at a time which is close to, or even at a precise instant in time, associated with the commencement of the universe.

'LIGHT' AND 'TIME' ARE INTERRELATED. These two factors operate at a speed, which is governed by the Law of Conservation: this in turn is influenced regionally in galactic terms, by data emanating *directly* relative to the intensity of the negative gravitational energy associated with the black hole at the centre of each galaxy. [The reader may refer to Section Two, item 5. pages 29-35: wherein an appropriate advance in astrophysics has been presented – together with a suitably allied corroboration provided by an international team of astrophysicists. Please refer also to page 3: wherein it is stated "the speed of light is variable, and has an *estimated* universal upper limit of 471,102,434 metres per sec."]

ASTROPHYSICISTS may desire to read again and consider the knowledge provided within Section Two of this White Paper, pages 17-47. We describe [indented within brackets which follow] certain aspects of 'medical derivatives' gained from an advance in knowledge of the formula, source, and workings of gravitational energy. Electric particles responsible for light are displaced-in-time by frequencies of

wavelength, which radiate with a 'field energy' speed that is constrained within the 'upper limit' of the universal time frame.

[NORMALITY applicable to the speed of light – is governed by the Law of Conservation (LoC). The velocity of the 'field energy' will be that of the speed of light *c* which appertains *precisely* to each individual galaxy. The latter speed is determined by the LoC, and will reflect the collective strength of the negative gravitational electric particle energy which comprises the 'black hole' at the centre of each galaxy.

The 'speed of light' when crossing remote regions of space – *outside* and beyond the limits of the 'gravitational reach' of any galaxy – will be that of the upper limit of the universal time frame, which is estimated to be 471,102,434 metres per second. The previous absence of this aspect of knowledge, has contributed to problems for physicists when seeking to determine the age of the universe – based on the understandably mistaken assumption that the Earth's 'field energy' speed of light was common throughout the universe.

ABNORMALITY is seen to apply within this context – where a 'slower' than normal 'field energy' speed is imposed on living tissue, *always* under the influence of radioactivity. The words radioactive or radioactivity are the terms applied in science, to the motion of electric particle energy that is <u>less</u> than the speed of light c.]

(ii) The electric particle 'field energy' that comprises atoms and thereby 'MATTER' in its <u>normal</u> state, IS FORMED BY ELECTRIC PARTICLE WAVELENGTHS – DISPLACED-IN-TIME at the speed of light *c*.

Non-radioactive atoms comprise of electric particle components operating with a 'field energy' at the speed of light c. **Radioactive atoms** comprise similarly of electric particle 'field energy'; however in this case operating at a speed which is <u>less</u> than that of light c.

Radioactive electric particle 'field energy' is out-of-sync with the electromagnetic spectrum. Thereby it is to be understood – radioactive energy is out-of-sync with the electric particle 'field energy' of matter which (commonly) operates at the speed of light c.

Knowledge of mechanisms underlying vital new knowledge for the medical profession are presented within this White Paper. We restate here, that new science which forms vital aspects of the nuclear medical physics is associated with the underlying cause and treatment of electrically abnormal radiosensitive pathogens. A treatment for an ionization-induced radioresistant pathogen, is described within Supplementary 'Reference' Information item 14 on pages 145-148.

(iii) The electric particle **'field energy'** of atoms operates within a standing wave. The back-and-forth motion of which causes atoms to vibrate and <u>is constant in its 'field energy' at the speed of light</u>, even when passing through different media which is observed to slow down the frequency

of the wavelengths. [Electric current within a wire or water for example, is known to travel at a much slower speed; due to the resistance offered by the electric particle subatomic structure through which the current is passing.]

The 'field energy' speed of the electric particle energy comprising atoms remains constant at the speed the speed of light c, unless the atoms are radioactive – in which case the 'field energy' speed is <u>less</u> than c.

- (iv) **Light is observed by scientists to be a particle or a wave.** Light is formed by fundamental photons (fphs): the pathway of each of these ultra-minuscule electric particle fphs (numbering *1.2349 x 10²⁰ in total per electron) creates a 'profile' forming each waveform: *i.e.* wavelengths emitting the spectrum of light
 - *A solar panel is enabled to receive these fphs and covert their 'collective' electric particle energy into electrons.
- (v) With the exception of hydrogen, which has no neutron atoms are formed by protons, neutrons, and electrons: the protons and neutrons have component quarks, the electron having component quarkels as stated on pages 20-21. Robert Wood-Smith and collaborating scientist Albert Mantiziba made the prediction (shown below) during the first half of 1995, concerning the most fundamental components of atoms. These are the long sought after gravity photons: each of which carries data, which is displaced-in-time.

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The proton is comprised of 2.2674 \times 10^{23} fundamental gravity photons. The neutron is " 2.2705 \times 10^{23} " " " " The electron is " 1.2349 \times 10^{20} fgphs. [See pages 149-150.]
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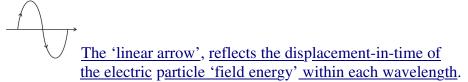
CONTINUING THIS SUMMARY for the convenience of the non-physicist – from the information provided on pages 20-21 of this White Paper: the reader has been enabled to consider the corroboration published in 'Science' magazine during February 1996, wherein William Carithers of the Fermi National Accelerator Laboratory, Batavia, Illinois, USA, when reporting on a result – observed and stated, "This is just the sort of effect you would see if quarks were not fundamental particles, but had some sort of internal structure." Chris Hill, theorist at Fermilab added | 'New Scientist' | 11 May 1996 | page 29: "It would suggest that whatever lies inside the quarks is incredibly tightly bound, in a way that theory can't yet accommodate." These statements provide suitable support for the above prediction, which were perceived and calculated approximately one year prior to the quotations within this paragraph being published in 'Science'.

THUS WAS PROVIDED independent corroboration of the ultimate 'fundamental photons'. The immense number of these 'fundamental *gravity* photons', were bound to figure within the development of our understanding of the universe and gravitational energy, light, matter and time. Indeed between the Autumn of 1994 and the close of 1996, the author and collaborating scientist Albert

Mantiziba formed an advanced knowledge of the last major mystery in science: the formula, source, and workings of quantum gravity. [Data associated with this knowledge has been preserved within some 300 pages of detailed notes – which is to be drawn upon to form Part One of a new book under the heading, 'The Ultimate Theory of Everything'.]

For electric particle energy to exist within the universe, it must be displaced-in-time. Furthermore, if electric particle 'field energy' is to be insync with the electromagnetic spectrum and thereby matter *including of course healthy tissue* – the following indicates certain realities associated with the electrical state.

(a) The fundamental *gravity* photons are each formed by a wavelength



(b) Within the above depiction of the 'displacement-in-time' (applicable to each fundamental gravity photon) there exists data which will comprise information appertaining to the 'characteristic' of each photon. [One perceives here a connection with the 'Higgs boson', also that attributed so far to its function and purpose.]

Scientists in recent times have commenced to consider the reality, the electric particle content of an atom does <u>not</u> account for its mass – there must be something else. Within the pages of this White Paper, the reader has received an opportunity to comprehend the implications of the latter term 'something else'. Furthermore and within this context, there has to be data, which is displaced-in-time within the many fundamental photons that comprise each atom.

(vi) FROM A MEDICAL STANDPOINT: biological systems operating with particle 'field energy' at the speed of light *c*, are normal and able to interact effectively with other biological systems operating in a similar manner.

However when biological systems operate with a particle 'field energy' that is less than the speed of light c, they are 'out of sync' with normal tissue-systems and are unable to interrelate with them. They have the potential of electrically abnormal pathogens and need to be corrected: most commonly by an appropriate exposure to electric particle 'field energy' displaced-in-time at the speed of light c.

The 'NDM-1 gene produced enzyme' – and every form of electrically abnormal pathogen cell, protein, bacterium, virus or gene – are potentially lethal agents of disease: any of which are beyond doubt,

responsible for a serious health problem. THE ELECTRICALLY ABNORMAL STATE referred to here, CAN BE TREATED by an appropriate use of electric particle 'field energy' displaced-in-time at the speed of light c – subject to appropriate equipment being used in a correct way and by a suitable technique.

Two of the three main types of medical equipment that are needed – have already been developed, clinically tested and proven to be highly efficacious. However, in the absence of the advance in nuclear medical physics presented in this White Paper, these highly successful and much needed treatments are neither widely used nor have they been understood correctly.

Worldwide, millions of patients continue to die needlessly each year.

Drug and antibiotic resistance (including NDM-1) will require the new medical equipment referred to earlier within this 'Section Three'. We refer to 'vital' new equipment which awaits potentially interested parties to meet, discuss and agree upon an appropriate design, manufacture, and suitable clinical trials. An appropriate outcome is predicted with confidence.

7. Mankind Acknowledges It Has A Limited Understanding Of 'Time'.

It is perhaps appropriate – in support of the numerous references within this White Paper to 'electric particle data displaced-in-time at the speed of light c' – that prior to conclusion of this document, we include a few further words on the 'subject of time', which the reader may find helpful.

Within the Preface to the book 'ABOUT TIME' 'Einstein's Unfinished Revolution' by Paul Charles William Davies [Published by Viking: ISBN 0-670-84761-5.]; the above highly respected author expressed the valued viewpoint – the scientific community are far from having a good grasp of the concept of time (page 38).

[Professor Paul Davies is a physicist, cosmologist and astrobiologist working at Arizona State University, where he established the 'Beyond Centre for Fundamental Concepts in Science'. He is also associated with the 'CENTRE FOR THE CONVERGENCE OF PHYSICAL SCIENCE AND CANCER BIOLOGY'.]

A Definitive Understanding of Time would include a full and detailed explanation, together with the appropriate evidence. These are matters which are to form an authoritative third and final part of the proposed new book named earlier within this White Paper, 'The Ultimate Theory of Everything'. [The subject of 'Time' requires a suitably greater detailed knowledge than would be acceptable for inclusion herein.]

Nevertheless, appropriately advanced specialist knowledge of nuclear physics confirms beyond reasonable doubt – **time exists as the direct**

consequence of the logical interrelationship between the displacement-in-time, and its association with the data carried by each and every fundamental *gravity* photon.

We are in a position to state categorically – time is formed by the displacement-in-time of data within gravity photons, associated with which all matter and radiation comprises. However there is much more that is yet to be conveyed, concerning the subject of 'time'.

Should it ever become the case that fundamental gravity photons (thereby matter and radiation within the universe) were no longer to exist – time would no longer have a foundation for its existence. Gravity photons are fundamental to the entire electric particle 'field energy' that exists within the universe, whether in the form of radiation, matter or antimatter. The displacement-in-time associated with fundamental gravity photons, is associated with the cause and effect by and within time: a subject matter explained (of necessity in part only) within this White Paper.

The existence of time is recorded by wavelengths of electric particle 'field energy' displaced in fundamental photons. In another sense also by clocks, history, geology, and astrophysics – in ways and means that facilitate measurement(s) of the passing of time as we *otherwise* know it to be.

[Note. There continues within the Supplementary 'Reference' Information (that follows) a 'highlighting in blue typeface' of additional aspects of 'nuclear science', associated with the advance that has been made in fundamental medical physics beyond the Standard Model.

Supplementary 'Reference' Information

continues hereunder from <u>'Section Two' page 47</u>

14. In the United Kingdom, 13,300 people were diagnosed with malignant melanoma during 2011: in the same region, there were 2,200 deaths in 2012 from this type of cancer. The World Health Organization in March 2005, estimated melanoma related deaths worldwide at 66,000.

The utilization of definitive or adjuvant radiotherapy for this form of cancer, has been relegated very largely to a palliative measure. Malignant melanoma has come to be viewed as a prototypical radiotherapy-resistant cancer.

An illustrated 'corroboration' associated with a successful treatment for malignant melanoma, utilizing a 'dual' means of applying electric particle energy at the speed of light c, is provided within this item 14.

MALIGNANT MELANOMA SKIN CANCER has been shown to be treated efficaciously, by the use of Radiotherapy utilizing X-rays (an electric particle 'field energy' at the speed of light c) – followed by Electron Replacement Therapy, in the form of low frequency electric current utilizing 500 kHz (ONLY at low frequency can 'ionization-induced' genomic instability be treated efficiently). The above 'dual' treatment forms a delicate balance between (a) the efficacious

treatment of the 'low-level' of damage caused by UVA rays at 320-400 nm and (b) the 'increased levels' of ionization introduced by the shorter UVB wavelengths of 290-320 nm.

<u>In the above way, malignant melanoma differs from other skin cancers.</u> The outcome of the 'dual' treatment (*independent photographic evidence is provided on page 147*) introduces corroboration – the malignant melanoma pathogen is comprised of radio<u>sensitive</u> AND radio<u>resistant</u> abnormal cells. Radiotherapy would be sufficient if the cancer was *only* radio<u>sensitive</u>: however it was found to be necessary to treat the ionization-induced radio<u>resistant</u> nature of some of the cancer cells, which had come under the influence of the 'increased levels' of ionization caused by the shorter UVB wavelengths of 290-320 nm.

(a) **Non-melanoma skin cancers** are the result of 'low-level' ionization by UVA radiation at wavelengths of between 320-400 nm, which is *only* sufficient to *no more than* interfere with and *not overcome* the 'natural protection' of DNA base pair atoms against low-level background radioactivity within the natural environment. UVA is *of course* the longer wavelength of ultraviolet radiation, which accounts for 95% of the solar UV that reaches the surface of the Earth. The outcome of which – is propagation by the DNA of abnormal 'radiosensitive' skin cancer cells: a type of cancer that will respond to irradiation with electric particle 'field energy' at the speed of light *c* and that can be treated by Radiotherapy: alternatively (*and preferably where suitable*) Photodynamic Therapy may be used.

A further alternative treatment that can be used in due course – when the 'new equipment' proposed within this 'Section Three' becomes available – would be via an appropriate application of the particle 'field energy' of electric current at the speed of light c – in respect of which the output of the 'electric current treatment can be reset to 500 kHz and in this way, provide 'Electron Replacement Therapy' which comprises the 2nd part of the 'dual' treatment indicated within this item 14.

[The author is in a position to provide 'photographic evidence' associated with **the efficacious treatment of basal cell carcinoma, utilizing very low-level direct current**. Evidence in support of which was provided earlier by the author of this White Paper for examination by Dr. Elisabeth Fraser-Andrews, then Consultant in Dermatology, Essex County Hospital, Lexden Road, Colchester, Essex CO3 3NB, United Kingdom.]

b) Malignant melanoma is consequential to a shorter frequency UVB radiation, than does give rise to the more common and less dangerous types of skin cancer.

UVB radiation introduces increased levels of ionization from the shorter ultraviolet wavelengths of 290-320 nm.

[Note. The frequency Hz. of visible light is 10^{15} . Ultraviolet rays commence at frequencies of $10^{16}/10^{17}$ Hz., concluding *their range* at 10^{18} Hz. X-rays commence *their range* at 10^{18} Hz.: the latter indicating the close proximity of one ultraviolet frequency with the otherwise shorter wavelengths of ultraviolet X-rays, which are *(of course)* an acknowledged ionizing radiation.]

A dual treatment is required: a delicate balance providing an efficacious treatment of the low-level damage caused by ultraviolet rays at 320-400 nm – also the increased levels of ionization, introduced by the shorter ultraviolet wavelengths of 290-320 nm. The patient is affected by the radiosensitive skin cancer cells referred to in (a): in addition the patient suffers radioresistant ionization-induced genomic instability of the skin referred to in (b) — the latter is in need of the additional

treatment by Electron Replacement Therapy (ERT), provided by an appropriate safe use of low frequency electric current at 500 kHz, *illustrated on this page 147*.

Suitable data is provided hereunder ~ from an independent European MALIGNANT MELANOMA clinical test treatment, before and after use of the 'dual' treatment.



The patient commenced treatment with Radiotherapy, followed by. ERT (500 kHz of electricity: low frequency electric particle 'field energy' at the speed of light *c*).



The above shows the image <u>after</u> both radiotherapy and ERT treatments.

The regression of the skin cancer is complete: the scars on the skin are indicated to be minimal. Some lightly developed melanoma cancers, may respond without ERT treatment.

MALIGNANT MELANOMA has in the past resulted in the deaths of many patients.

The number of patients who continue to this succumb to this disease is needlessly high.

THIS TYPEOF SKIN CANCER IS CONSIDERED BY MANY TO BE RADIORESISTANT. The information and photographic evidence points to this cancer type having radioresistant and radiosensitive cells within its mechanism.

The above 'Supplementary 'Reference' Information' 14 was referred to on pages 63. 68. 69.121. and 141.

SUMMARY.

Knowledge of fundamental nuclear medical physics indicates that (in combination with the harmful effects of toxic chemicals, referred to earlier in this White Paper) excessive UVA radiation over a period of time, erodes the otherwise natural capability of atoms comprising the skin, to be defended against low-level radioactivity within the natural environment. When the latter protective mechanism is no longer operating efficiently, this gives rise to the propagation of radiosensitive skin cancer - which can be treated successfully with Photodynamic Therapy (PDT). In cases where the ionization factor is greater due to UVB radiation, the more severe skin cancer malignant melanoma will be propagated – causing the introduction of some radioresistant cells and the need for the 'dual treatment', referred to in (b) of this Supplementary 'Reference' Information 14. [References to

Photodynamic Therapy can be found on pages 6-7 *within* (d), 13, 16 (items 5&6), 49, 66, 69, 71, 73-74, 76, 78, 84, 91, 93, 95, 97-8, 105, 113, 127, 130, and 147-8.]

*RECOMMENDATION. An opportunity under appropriate test conditions should be sought, to treat malignant melanoma with Photodynamic Therapy as part of the 'dual' treatment, instead of Radiotherapy. [The reader is invited to become familiar with the information referred to within Supplementary 'Reference' Information 16.]

15. Electrochemotherapy: technological advancements for efficient electroporation-based treatment of internal tumours. By D Millačič - 02012 - Cited by 42 related articles.

Med Biol Eng Comput. 2012 December; 50(12): 1213-1225. Epub 2012 November 21. doi 10.1007/s11517-012-0991-8 www.ncbi.nlm.nih.gov/pubmed/23179413

16. A ray of light can kill cancer cells without leaving terrible scars – so why are so few offered it? – is the title of a published article by Jerome Burne: a contributor to 'Medicine Today' and is one of Britain's leading medical health journalists. The website link is provided below:

http://www.dailymail.co.uk/health/article-1219948/A-ray-light-kill-cancer-cells-leaving-terrible-scars--offered-it.html [Alternatively, enter the words in **bold** within this item 16.]

On 19th September 2014, Linkedin (via the Quantum Physics group) drew to the attention of Robert Wood-Smith under the heading 'What is Gravity Made Of?', the information that follows — www.pbs.org/wgbh/nova/physics/universe-gravity.html 8 May 2014 - A "cosmic fingerprint" reveals the universe's beginning and gravity's microscopic secrets. Also that gravity is made of quantum particles, called gravitons.

The reality that gravity is made of tiny particles known as gravitons – was otherwise **referred to within 'Section Two' of this White Paper as 'fundamental gravity photons'.** These were predicted by Robert Wood-Smith during the Winter of 1994/5. The reader is referred to items 6. and 7. on pages 54-56, wherein it is stated:

The proton comprises approximately 2.2674×10^{23} gravity photons (fphs). The neutron " 2.2705×10^{23} " " " ".

The electron " 1.2349×10^{20} fgphs. See also pages 149-150.

These combine to form respectively the quarks of the proton and neutron, also the electron.

'Corroborating evidence' was published subsequently by the journal 'SCIENCE' in February 1996 as referred to within this White Paper on pages 20-21 and 55.

The atoms comprising DNA/RNA are thus formed by *fundamental gravity photons, each of which *unless radioactivity-induced* are formed by a wavelength of electric particle 'field energy' operating at the speed of light *c*,. Radioactive electric particle 'field energy' moves at less than *c* and thereby carries a danger to healthy tissue. *Supplementary 'Reference' Information, item 21 on page 149.

The above fundamental 'electric particle' wavelengths carry data which, when operating normally, are displaced-in-time at the speed of light c. Radioactivity-induced electric particle data, because its operational speed is less than that of light c, is abnormal in its function and the effect it carries within living tissue.

18. The Law of Conservation (LoC) controls:-

The displacement-of-energy-in-time and its electric particle data.

The maintenance of the principal subatomic units of matter at their values of +1, -1, and 0 (neutral) electric particle energy.

The electrical particle 'field energy' speed – at the limit of the speed of light c for each galaxy: this reflecting the intensity of the net negative gravitational integrity of the 'black hole' at the centre of each galaxy.

19. Carcinogenesis is generally understood by the medical profession to be a complex multistage process, involving various biological mechanisms that result in progressive changes at the cellular, genetic and epigenetic levels: leading to a reprogramming of cells, causing an uncontrolled cell division and resulting in the formation of a malignant mass.

Alongside such an understanding, it needs to be added: **in instances where the mechanisms are operating in radio**sensitive **tissue**, the data associated with the multistage process will be distorted. The treatment of radiosensitive health conditions are detailed suitably within this Section Three. [For information appertaining to RNA and DNA, also 'whole body' treatments - the reader is referred to pages 110-144, also Supplementary 'Reference' Information within item 20. which follows.]

- 20. RNA is a feature of many viruses. Viral reproduction requires reverse transcriptase that converts the RNA into DNA (some viruses use DNA for their genome) which is then incorporated into the host genome and directs it to produce viral components these are then assembled into 'whole functional viral particles'. Where the mechanism of viral reproduction is operating in radiosensitive tissue, the data is bound to be distorted. Treatment of the consequential radiosensitive health condition, will need a 'whole body' treatment. For suitably detailed information, refer to Section Three pages 110-144.
- 21. Theoretical Physics *Journal reference: Physical Review Letters, provided by the University of Maryland.* The LHCb Collaboration appeared online August 31, 2015 ~ published 4th September 2015 in the Journal Physical Review Letters.
 - 'Evidence suggests subatomic particles could defy the standard model' by David Thornton ~ http://phys.org/news/2015-08-evidence-subatomic-particles-defy-standard.html?
- 22. The fractional electric charges forming the electron are *approximately* $-\frac{2}{3} \frac{2}{3} + \frac{1}{3} = -1$ unit of charge. We have said 'approximately', for the reasons that follow:-

Hydrogen (¹H) has (in common with atoms within the periodic table) a measure of weight: in the case of (¹H), on a scale which is very diminutive. *Evidence for this – an empty tanker weighs minutely less, than when filled with ¹H. The atom of hydrogen comprises one proton = +1 unit of charge, also one electron that is said to be = -1 unit of charge – the hydrogen atom therefore gravitationally would = 0 (nil) charge. If the latter data were entirely correct, hydrogen should have no weight: *However, ¹H is observed to have an ultra-minuscule weight: this means the electron is (by the most ultra-minuscule of margins) in excess of -1 unit of charge.

It is recognised, atoms comprise mainly of space. To perceive this reality – consider please, (a) a nucleus of an atom to be of the scale of a ball at the centre of a city the size of Peterborough in the United Kingdom: (b) to the same scale, the electrons would be circling within the outer suburbs of the city. The point being made – is that the electrons to scale are much further away from the nucleus, than are the protons and neutrons to each other in their normal capacity of forming an atomic nucleus.

Gravitational energy becomes dilated by distance. In nature, the need is for the electron to be slightly in excess (by an ultra-minuscule margin) of net -1 unit of charge. For this reason, when the electron(s) are at their normal distance from the nucleus – nature needs to bring fundamental gravity photons (fgphs) together to form a single unit of electric particle charge, marginally in excess of -1 unit of charge – the latter when dilated by distance from its nucleus and thereby very slightly diminished in its ultra-minuscule charge, needs minutely excess gravitational energy in the form of gravitational/electric charge, in order to maintain the necessary net charge which is slightly in excess of -1 unit of charge.

There has been estimated to be 2.2674×10^{23} fgphs per **proton** = +1 unit of charge and the **neutron** 2.2705×10^{23} fgphs = 0 (neutral) charge. The **electron** has been estimated to be 1.2349×10^{20} fgphs of minutely larger gravitational/electric charge in all atoms and expressed as an electrical value = to very minutely in excess of net -1 unit of charge per electron – calculated with indirect help from the Max Planck Institute by my professional adviser in the field of mathematics/physics.

23. "UNIVERSE TODAY - SPACE AND ASTRONOMY NEWS.

Article Updated 26 Dec, 2015.

HIGH ENERGY GAMMA RAYS GO SLOWER THAN THE SPEED OF LIGHT?

BY FRASER CAIN.

The speed of light is the speed of light, and that's that. Right? Well, maybe not. Try and figure this out. Astronomers studying radiation coming from a distant galaxy found that the high energy gamma rays arrived a few minutes after the lower-energy photons, even though they were emitted at the same time. If true, this result would overturn Einstein's theory of relativity, which says that all photons should move at the speed of light.

The discovery was made using the new MAGIC (Major Atmospheric Gamma-ray Imaging Cherenkov) telescope, located on a mountain top on the Canary island of La Palma. Since gamma rays are blocked by the Earth's atmosphere, astronomers have figured out a clever trick to see them from the

ground. When the gamma rays strike the atmosphere, they release a cascade of particles and radiation. The Cherenkov technique detects this cascade, and then works backwards to calculate the direction and energy level of the gamma rays. With a 17-metre detector, MAGIC is the largest telescope of its type.

The international team of researchers pointed the telescope at Markarian 501, a galaxy 500 million light-years away that contains a blazar – a supermassive black hole that periodically releases bursts of gamma rays. More material is falling into the black hole than it can consume, and so it gets squeezed into jets that fire off from the poles of the black hole at close to the speed of light. What astronomers call a "blazar" is when the jets of a supermassive black hole are pointed directly at the Earth.

Researchers sorted high- and low-energy gamma ray photons coming from the blazar with each flare up. Since all the radiation was emitted at the same time, and the speed of light is the speed of light, you would expect the high-energy photons to arrive at the same time. But no, the high-energy photons showed up around 4 minutes later.

So what's happening? The researchers are proposing that maybe the radiation is interacting with "quantum foam". This is a theoretical property of space itself, and predicted by quantum gravity theory – a competitor to string theory.

Original Source: UC Davis News Release.

24. Electric particle 'field energy' at the speed of light *c* when conducted through living tissue, meets opposition to the flow of electrons (*resistance*) resulting in a dissipation of energy usually in the form of heat. Heat of itself, does not kill *live* radiosensitive cancer cells. However, when the degree of heat generated reaches 43-45°C, this can assist the operator of medical equipment to understand, when treating radiosensitive cancer cells – the level of 'electric particle saturation' that has taken place by the input of electric current, has reached a sufficient level for the treatment to be viable: given the treatment has been applied for a sufficient period of time (*the time factor being dependent on the scale of the tumour under treatment*). [Experienced Surgeon David Lloyd has confirmed, the equipment "can treat very large tumours within a few minutes."]

A report written by Dr. Alejandro Úbeda, Servicio Investigación-BioElectroMagnetismo, Hospital Ramón y Cajal, 28024 Madrid, Spain, 16th June 1999, confirmed that thermal effects produced by the medical equipment reported upon here and utilizing an electric current – in a manner that can be seen in parallel to that conveyed on pages 88-89 relating to HYPERTHERMIA wherein reference is made to medical equipment applying electric current at 500 kHz (at the speed of light c) to radiosensitive cancers – were not the underlying cause of cell death. The demise of the cancer cells was the outcome of the electric current in use, which was physically obliged to create the heat generated by the equipment concerned. It is to be noted, please: electric current has a 'field energy' that operates always at the speed of light c. [Reflecting matters on pages 87-90.]

Note. The Partnership holds a copy of the more detailed 11-page report presented to The Technical University, Munich, Germany; prepared during more comprehensive research completed subsequently by ALEJANDRO ÚBEDA, Ph.D. SERVICIO INVESTIGACIÓN-BIOELECTROMAGNETISMO, HOSPITAL RAMÓN Y CAJAL, 28034 Madrid, Spain – who is totally independent of the interests of this Partnership.

i) DR. S. JANES, CLINICAL CANCER SPECIALIST AT UNIVERSITY COLLEGE LONDON, has stated – cancer cells when heated to 43°C start to die. [The treatment is

known to the establishment as hyperthermia therapy: the energy source is a series of electromagnetic pulses at the speed of light c.] Page 87.

- ii) A report © 2011 THE AMERICAN CHEMICAL SOCIETY August 11, 2011: claimed that magnetic nanoparticle heaters can kill cancer cells once the temperature has exceeded 43°C. Page 87.
- iii) The NATIONAL CANCER INSTITUTE at the National Institutes of Health http://www.cancer.gov/cancertopics/factsheet/Therapy/hyperthermia in a review dated 31st August 2011 indicated: that high temperature hyperthermia has been successful in the treatment of (most but *not all) cancer cells, utilizing temperatures up to 113°F (45°C). [*The referred to lack of success is associated with 5% or more abnormal radioresistant ionization-induced cancer cells, and/or those radioresistant cancer cells propagated under the influence of the data carried by an abnormal inherited gene.] Page 88.

A consensus of INDEPENDENT MEDICAL EXPERIENCE CONFIRMS, that a temperature of 43-45°C is associated *indirectly* with the death of cancer cells. This heat is not the cause of death: but the temperature at which the level of saturation of electric current – at the 'field energy' of the speed of light c – is sufficient to induce the death of radiosensitive cancer cells. Hence the commonly recorded 95% rate of death of liver cancers achieved by Microwave Therapy – including cancers considered previously to be untreatable.

The thermal nuclear medical physics beyond the Standard Model presented within this item 24, will be found to be associated with specific contents of this White Paper applicable *also* to the treatment of other forms of electrically abnormal pathogens and conditions referred to within this document.

25. Added June 2019.

An Horizon programme, BBC2, 08/05/2019, 'How small is the universe' – involved a number of scientists, who are looking for the smallest particle in the universe. Thereby introducing a number of scientists, who are engaged in seeking knowledge of advanced nuclear physics, which are tied precisely to those matters beyond the Standard Model, and allied closely in fine detail to subject matters expressed within pages 17-47 of this White Paper. The referred to leading physicists are seeking now to find the same fundamental particle photons my Partners and I originally understood existed in 1995, and that we further named and quantified within this 'White Paper' published during the Spring of 2017.

The following scientists were named within the BBC 'Horizon' programme, referred to above:-

(i) <u>Professor Andy Parker – University of Cambridge, UK</u>. His interests include the Large Hadron Collider, black holes and gravitational energy: he is presently seeking to find the ultimate *smallest* particle in the universe <u>within the Higgs boson</u>. [Readers can find references to the "Higgs Particle" on page 18 – the "Higgs boson" on page 19 – and "THE HIGGS BOSON" on pages 21-23: also in addition under 'PHYSICS AND MEDICINE' on pages 19-47 which, until this White Paper was published, had remained a 'SCIENCE JIGSAW'.]

<u>The smallest particle</u> is the *formally missing* **fundamental gravity photon** – **of which the proton, neutron and electron are** *now understood to be* **comprised** – as indeed was first indicated by this writer in July 1995, and calculated in numbers by my colleague Albert Mantiziba BSc.(Hons.) Chem.Eng., with indirect help from the Max Planck Institute. The figures concerned, can be referred to on pages 20-21 of this 'White Paper'. [Andy Parker has acknowledged, he expects the Higgs to contain a large number of particles: possibly more than the LHC can determine.]

[The final paragraph on page 21 reads – "The Higgs boson has been indicated to be a heavy W particle of around 125-126 Gigaelectronvolts (GeV). The weight of this W particle reflects the number of fundamental gravity photons of which it comprises. Those *particles are associated with the proton's estimated 2.2674 x 10^{23} fundamental gravity photons (fgphs) indicated within item 2. (pages 20-21) – which have been observed by implication to become disseminated from the Higgs W boson within less than a trillionth of a second."] There are references on pages 20-21 of the 'White Paper', to the number of fundamental gravity photons which form also the *neutron i.e. 2.2705 x 10^{23} : in addition, those forming the electron, which we shall refer to next.

- Dresden. X-ray studies. Structure of Electrons: is seeking to find the ultimate smallest particle within the electron's three parts, which he and his colleagues discovered and presented within the Horizon Programme, BBC2 08/05/2019. Professors Brink and Parker are unaware as yet they are each seeking to ascertain the underlying presence of an immense number of fundamental 'gravity' photons: which in the case of the electron number 1.2349 x 10²⁰ see pages 20-21 of this 'White Paper' (in the case of the Higgs Boson, a clue to the number is indicated also within the above last paragraph. [It is relevant to state: this writer informed the independent scientist Albert Mantiziba named above, of the values of the electrons' three main components in November 1994. A reality corroborated indirectly by three scientists in the United States, when they were awarded the 1998 Nobel Prize in Physics, for their discovery the electron has components.]
- (iii) Dr. Robert Wagner Max Plank Institute for Physics, has interests in gravity and photons. LIKEWISE ALSO Professor Govanni Amello-Camelia University of Rome, who is interested in Space-time associated with the Magic Telescope (MT) used to seek microscopic details, when reaching out into the most distant regions of the universe, attempting to find how the universe works on the very smallest scale. The MT when measuring during in 2005 a gamma ray outburst, recorded photons of different energies having arrival times that differed by seconds over billions of years: enabling them to draw the conclusion the speed of light is not a universal constant, as indicated by previous theory.

<u>May we add in conclusion</u>: it has been mentioned within this White Paper (*item 4, page 28*): <u>Sir Brian Pippard, Cavendish Professor of Physics of Cambridge University for 11 years</u> expressed the viewpoint — that when physicists reach an understanding the speed of light is <u>not</u> a universal constant, many of the outstanding problems in physics could be resolved.

It has been now understood within the independent and finely corroborated detail of this White Paper

- the speed of light is not a universal constant –

there **are** some variations in its velocity.

When such a distortion occurs within living tissue, via that understood to be an electrically abnormal pathogen – the consequences will remain potentially lethal, until or unless A CORRECT TREATMENT IS PROVIDED BY A KNOWLEDEABLE MEDICAL PROFESSION.

Derivatives of the foregoing advances that have been made by the Partners in the field of nuclear medical physics, have been expressed as an 'easy read' for non-physicist members of the medical community and other interested parties within this White Paper – published upon the Internet during the Spring of 2016 – with the additional information provided now, within the above item 25.

Robert G. Wood-Smith & Partners (2002).

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In grateful recognition of -

H. Rosalie Bertell Ph.D. Environmental Epidemiologist. Relationship commenced 2004 – Associate Partner March 2009 – died 14 June 2012.

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