

A New Understanding of Breast Cancer and Alternatives to Mammography

ROSALIE BERTELL

Une recherche qui veut changer notre compréhension de la pathologie du cancer du sein basée sur les théories de la physique quantique. Si on comprend les anomalies subatomiques de presque tous les cancers du sein, on sera en mesure d'améliorer les diagnostics et les traitements et d'offrir des alternatives non-toxiques à la chimiothérapie et à la radiation. L'auteure vote en faveur de méthodes de dépistages moins à risques et davantage de tests cliniques.

Robert L. Egan is credited with the development of mammography equipment in the 1960s, some 50 years ago. The first commercial machine was available in 1965. The requirements for an acceptable technology at that time were that the findings be reproducible, using the same instrument and technician. No health or safety studies were undertaken before it was promoted for general usage by the medical community. Nor was there concern about compression of the breast, known at the time to risk rupture of an already formed tumor, causing metastasis. The fact that X-ray exposure caused breast cancer was not widely known until the late 1970s.¹

Mammography programs gradually spread geographically since that time, although some in the medical research community have been opposed to their widespread use for screening (not for diagnosis) from the beginning. The root cause of suspicion about the use of mammography has been that they expose the breast tissue to X-radiation, which to this date is the only proven cause of breast cancer. The counter argument has been that early detection of breast cancer prevents breast cancer death; therefore, any breast cancers that are caused by the X-ray will be detected early and “cured,” if the woman stays in the program. Unfortunately, both of these theories appear to be false, given the new understanding of the biophysical cause of most breast cancers, suggesting that up to 95 percent of cancers are caused by subatomic activity triggered by radiation or exposure to environmental toxins (Wood-Smith).

In this paper I will discuss new findings as to the underly-

ing cause of breast cancer (and other cancers), and the new light that this shines on old “truths” about diagnosis and treatments. This new finding supposes an understanding of the sub-atomic structure of matter (quantum physics), an area where direct observation is impossible and one must use indirect methods for demonstrating that the new understanding is accurate. These indirect methods include the ability to diagnose breast cancer using the theory, and the ability to prescribe and predict treatment outcomes that are medically successful. This new theory has proven accurate so far in both of these aspects. Women will be glad to know that under this new understanding of breast cancer's cause and treatment, neither the biochemical approach to a cure, using chemotherapy with its devastating side effects, nor radiation therapy, which can induce new cancers as well as cause cardiovascular diseases, are needed for detection or treatment of up to 95 percent of breast cancers. Although I need to talk about findings in biophysics, I will try to use familiar terms and understandable science.

Relevant Findings in Quantum Physics

Most people have learned about the atomic structure, namely that the atom is composed of electrically negative electrons and an equal number of electrically positive protons. All atoms except hydrogen also contain neutrons, which are electrically neutral. Having equal positive and negative charges, all atoms are therefore electrically neutral by nature. Atoms combined into molecules make up all living and non-living material in our universe.

In 1915, Niels Bohr proposed a deeper structural model for the atom, based on the solar system. It was observed that the electrons moved in “shells” with specific energy around the nucleus, and the energy existed in quanta, i.e., the electron could move between the adjoining shells by gaining or losing exactly one quanta of energy. This has led to the name Quantum Theory,

or more specifically, Quantum Mechanics, as the study of motion in this extremely small sub-atomic domain. Further research in the 1960s established as factual that the proton and neutron contain smaller particles, called quarks, arranged in orderly fashion and in constant motion. The 'new' atom was found to consist mostly of empty space.

It is difficult to get a mental picture of the atom, but thinking about the solar system with planets both spinning on an axis and moving in their orbits around the sun, is a good start. The atom is mostly energy, with its

of electric particle 'gravity photons' and harmonizing their findings with classical and quantum physics. They have also derived theories based on this new understanding which elucidate some of the most difficult-to-treat modern diseases, including cancer, and have paused in their work in physics to communicate these health-related findings to inform medical personnel, and enhance their power to heal (Wood-Smith).²

In 1994, Robert Wood-Smith predicted that the electron was energized by extremely small partial electrical charges that he called quarkels (small quarks), calling

One of the most difficult medical problems today is the growing toxicity of chemotherapy needed to overcome breast cancer. The treatment involves the most toxic of pharmaceutical medicines and the most extreme of radiation therapies, but even with this all-out assault on the breast tissue, the disease is often fatal.

"size" determined by the constant motion of the atomic and sub-atomic particles, just as a human can take up more space by spinning an object around him/her self so that no one can get close without an encounter with the moving object.

Taking one step further into this subatomic realm, and imagining that within the electron itself, and the quarks, which make up protons and neutrons, there are even smaller particles, which we will call 'gravity photons', moving constantly with extremely small electric particle 'field energy,' we have grasped the newest picture of the atom. In summary, this new theory posits extremely small electric particles, 'gravity photons', the electric energy of which makes up quarks (components of protons and neutrons) and electrons. The electric energy of 'gravity photons' is constantly moving within a tightly defined space-time standing wave. These 'gravity photons' form the fundamental particles giving rise to the electrical energy of quarks, protons, neutrons and electrons, which in turn form atoms and molecules. This is a very new understanding of atoms, available to only a small number of scientists since about 1994, and its implications are not widely known or understood. Intact atoms are the smallest unit of all chemical and biochemical reactions, while the 'gravity photon' electric particles form a digital bioelectric communication system, within or below the chemical system, important in maintaining healthy living tissue, organs and the whole intact living being.

How Do We Know This Is a True Picture of the Atom?

Robert Wood-Smith, with the collaboration of an independent scientist Albert Mantiziba, is responsible for developing the equations and quantification of this theory

attention to the importance of investigating the sub-atomic levels of activity. The 1998 Nobel Prize in Physics was awarded to three scientists in the United States, for their discovery that the electron had components. This was confirmation of the existence, but not the nature of the quarkels.

Science magazine in 1996 reported that American researchers have said they found that collisions between quarks in a particle accelerator were unexpectedly violent. William Carithers, of Fermi National Accelerator Laboratory, in Batavia, Illinois, told *Science*: "This is just the sort of effect you would see if quarks were not fundamental particles, but had some sort of internal structure" (Glanz 758).³ The 1997 article in *New Scientist* reported the results from DESY, the German Electron Synchrotron, that pointed to the existence within the electron of what is described as a "leptoquark," previously called a quarkel by Robert Wood-Smith (Muir "Science" 14). These small particles are only beginning to be understood by scientists.

Nature of These Sub-atomic Electrical Particles Called 'Gravity Photons'

The 'gravity photon' is seen as a waveform. It needs to be understood that the waveform (i.e., a wavelength) is a 'profile' indicating the pathway of an 'electric particle' (with a partial charge) consisting of gravitational energy. Researchers assumed that for electromagnetic photons the length of the wave form or 'profile' was the 'size' of the particle. However, experiments conducted by a team led by Thomas Ebbesen of the Louis Pasteur University in Paris and the NEC Research Unit in Princeton, New Jersey, have shown that light could be transmitted through "quantum cavities" with "100 per cent efficiency at a wavelength

ten times bigger than the diameter of the hole” (Chown 667).⁴ This suggests that the waveform (i.e. wavelength) is being formed by a small enough ‘particle of electric energy’ which, according to Ebbesen, would be able to “get 1000-nanometre light through 150-nanometre holes” (Chown 669).

The former ‘theory’ that the photon has an effective size equal to its wavelength no longer stands. A wavelength may now be understood to result from a ‘particle of energy’ (the fundamental photon) being displaced by its waveform over a distance in-time. The length of that displacement-in-time will determine the characteristic presented by the energy—a reality demonstrated by the study of the various frequencies that comprise the photons of the electromagnetic spectrum. These variable characteristics are now used to form radio waves, microwaves, infrared, visible light, ultraviolet light and X-ray, gamma rays and cosmic photons, likely also electricity.

Modern Medicine is Based Largely on Biochemistry

Mendeleev’s *Principles of Chemistry* was first translated into English in 1891. His Periodic Table facilitated an understanding of the chemical basis of living beings and made chemistry the most advanced of the sciences at the turn of the twentieth century. At the time, the bioelectric properties of the human body were recognized, but their mechanisms were not understood, and many dubious electrical experimental treatments were being practiced by doctors, some bordering on quackery.

In 1910, the Flexner Report was issued to reform medical education in North America and at the same time, to bring it into the mainstream of scientific methodology. University medical education adopted the scientific method that was thoroughly grounded in human anatomy, physiology and biochemistry. Unfortunately, to curb the excesses in bogus electrical treatments, the Report banned the use of biophysical treatments “until there was a thorough understanding of the underlying science” (Flexner 1910). Subsequently, biophysics was dropped in most medical curricula, and the medical profession began to depend only on pharmaceuticals (chemicals) and vaccines (chemicals) to solve all medical problems. As was noted, chemicals work on the atomic and molecular level, but are ineffective when the subatomic level is abnormal. Looking back, we see that during the past century great strides in understanding the fundamentals of physics have been made, yet the medical community is ill prepared to understand, let alone use, this new knowledge.

Medicine has progressed greatly, but it is still unable to treat or treat successfully many antibiotic resistant infections, cancer, and various other illnesses like Alzheimer’s, Parkinson’s disease, and AIDS, which resist pharmaceutical treatment. Some cancers have been successfully treated with X-radiation, although this treatment also has unwanted

side effects. As a class, these diseases exhibit non- or miss-communication properties, relative to the human body’s immune system (which fails to destroy them as “foreign”) and standard (normal) medicines (which fail to work as expected). These difficult or seemingly impossible to treat pathologies can be expected to benefit most from a deeper understanding of the subatomic electric particle theory.

The commonality in these diverse pathologies is the non- or miss-communication between the body’s immune system and normal medicines with the pathogen. In this context, the new understanding of the electric particle ‘field energy’ generated by the ‘gravity photons’ within quarks and electrons of the atoms, is that the photon vibrations (moving within a standing wave) have slowed to a speed less than the speed of light c , that is, they are vibrating at less than the normal speed applying to the atoms of matter on this planet. Most people have experienced the non- or miss-communication or garbled message of a digital transmission which is played at a slower than normal speed. This is similar.

What could have caused the slowing down of the primordial motion of the ‘gravity photons’ in previously healthy tissue? The only known particles on our earth which have the electric particle ‘field energy’ slower than the speed of light c , are particles of radioactivity—alpha, beta and gamma particles—violently exploded from the nucleus of unstable chemical elements which either occur naturally or are artificially produced in a nuclear reactor or nuclear explosion.

The slower moving electrical photon energy of the radioactivity—alpha, beta, and/or gamma particles—can come into direct contact or close vicinity of atoms in the DNA within cells of living tissues (this applies also to proteins, bacteria, and viruses, in plants, animals or humans). The affected DNA can begin to propagate electrically abnormal pathogenic cells. The normal vibrations, within some of the tissue’s cellular atoms, can begin to move in-sync with the abnormal vibration of the electric particle ‘field energy’ within atoms of the ‘abnormal DNA’—some whole cells becoming ‘abnormal cells’, that is, out-of-sync within the natural tissue environment. One such series of changed cells is referred to as a cancer.

This problem is made worse by the various chemical hazards in the environment, which can destroy the natural immunity to background radiation in the environment, especially of the DNA within cells.⁵ Once a sufficient number of cells become ‘abnormal’, this abnormal slower moving ‘field energy’ forms characteristic abnormalities associated with the various electrical energy related pathologies called ‘radiosensitive’, since they respond to energy treatment by electrical particle ‘field energy’ at the speed of light c . This phenomenon has been recently called genomic instability. It appears to be involved also in the mysterious ‘bystander effect’ by which cells not directly affected by radiation, but near to the affected cells, can also develop malignancies or other pathologies.

Implications for Breast Cancer

One of the most difficult medical problems facing doctors today is the growing toxicity of chemotherapy needed to overcome breast cancer. The treatment involves the most toxic of pharmaceutical medicines and the most extreme of radiation therapies, but even with this all-out assault on the breast tissue, the disease is often fatal. Understanding of the abnormally slow 'field energy' of this pathology (in up to 95 percent of cases, as observed in Europe and North America) leads to remedies which raise the energy

abnormal radioactive particle to harmonize its electrical particle 'field energy' with that of the radioactive particle.

It is scientifically feasible that the loading of toxic chemicals now in our environment has undermined the natural ability of the body to resist the background radiation hazard. This natural resistance ability, perhaps due to greater opportunity for absorption and accumulation of toxic chemicals, may also decline with chronological age, since, historically, most cancers have occurred in old age.

The Trimprob analyzes the condition of tissues and organs in real time, detects and localizes radiosensitive pathologies and finds them at a very early stage. It can be used while patients are dressed and comfortable, and offers immediate results with a high degree of effectiveness.

level of the radiosensitive tissue, so that the message of the electrically abnormal (radiosensitive) cancerous tissue can be 'read' by the body's immune system and thereby marked for destruction by the immune system. Normal tissue, already operating with 'field energy' at the speed of light c , will not be affected by this therapy.

Diagnosis

In an American clinical trial involving 463 women (100 of whom were known to have breast cancer), the Biofield Diagnostic System scanner, which records the low electrical particle 'field energy' characteristics of tissue, was able to select and identify 95 percent of women with known breast cancer as having slower than normal 'field energy', i.e., as being radiosensitive. In this test, two metal discs are placed on the breast, and the electrical differential between the two is measured. There is no compression of the breast needed. The results confirmed that most breast cancers in this U.S. trial were distinguished by electric particle 'field energy' which was moving slower than normal 'field energy' of the speed of light c . Such an abnormal state would have required the following three conditions:

- Loss of normal protection of the DNA against natural background radiation, since radioactive particles are the only particles on earth known to have an abnormally slow electric particle 'field energy'
- Exposure to such abnormal background radiation either from a natural source, a technologically enhanced natural sources (like uranium mining debris), or fission/activation products from nuclear reaction activities
- And the ability for tissue in close contact with an

These slow electric particle 'field energy' breast cancers (up to 95 percent of the total in the U.S. trial referred to above) are precisely the breast cancers caused by exposure to radioactive particles (alpha, beta and/or gamma particles) known to have slower electric particle 'field energy' than the speed of light c . The five percent or more of the breast cancers which that do not exhibit a slower than normal electric particle 'field energy', are the result of ionization or genetic inheritance, and will require different treatment than is discussed in this paper.⁶

The Biofield Diagnostic System scanner is designed to replace the mammography machines.⁷ It is more efficient in recognizing radiosensitive cancers than mammography, ultra sound or physical examination.⁸ It is also able to diagnose about 30 percent of those breast cancers in younger women with dense breasts, which are usually missed by mammography.

The Biofield Diagnostic System scanner can successfully distinguish between those breast cancers which will respond to electric particle energy treatment (commonly up to 95 percent, less in some countries), with photoelectric or low intensity microwave treatment, and those which require different treatment (commonly five percent or more). It does not require compression of the breast, and does not itself cause breast cancer.

Biofield Corp., with headquarters in King of Prussia, PA, and the MacKay Group recently established a Chinese national healthcare joint venture built around Biofield's breast cancer diagnostic device. MacKay has been backing Biofield since 2004. The Joint Venture (JV) will be called Worldwide Lifecare Limited or the Carelife JV because the agreement is between Biofield and Carelife, which is operating through its appointed agent, China International Exchange Ltd. Funded with approximately \$363 million, the Carelife JV has opened a China network of medical

clinics, call centers and data centers for research and development. The first medical clinic opened in October 2008, at Carelife's Headquarters in Shanghai. By 2012, Carelife expects to open more than 500 medical clinics in China's major cities, which will make the JV's technology available to a 60 percent share of China's urban population. The JV includes, as a partner, China's National Labor Union, and it is funded with an investment by the Chinese Government. The 500 medical centers will open in Labor Union centers. China's major insurance carriers have agreed to refer their clients to the centers.

On 12 June 2003, a similar instrument, the Trimprob, was introduced at the San Carlo Borromeo Hospital and the European Institute of Oncology, in Milan, Italy.⁹ The Trimprobe is able to detect a variation in electromagnetic wavelengths between healthy tissue and cancerous tissues. Breast cancers formed by slower than normal electric particle 'field energy' resonate around 400 megahertz, while healthy (normal for particle electric 'field energy') breast tissue resonates at 1350 megahertz. Therefore, Trimprobe is capable of identifying up to 95 percent of radiosensitive breast cancers. The Trimprob analyzes the condition of tissues and organs in real time, detects and localizes radiosensitive pathologies ranging from inflammatory conditions to cancers and, most importantly, finds them at a very early stage. It can be used while patients are dressed and comfortable, and offers immediate results with a high degree of effectiveness.

Trimprob contains an antenna that generates an electromagnetic field at very low power, much less than that of a cell-phone, interacting with tissues at the submicroscopic level. A computer linked to the probe analyzes the amount of interference at different frequencies and displays results in real time in an easily understandable graphical format.

The Biofield Diagnostic System scanner and the Trimprob are consistent with the theory put forth by Robert Wood-Smith and explained here. Additionally, they help to confirm this new understanding of the deeper subatomic problem underlying most cancers, including breast cancer.

Treatment

The tumors that are characterized by slower moving electric particle 'field energy' within the atoms of diseased tissues will respond to high or low frequency electric particle 'field energy' at the speed of light c . This accounts, for example, for the observation that X-ray therapy has been widely recognized as capable of treating cancer. However, the mechanism by which the radiotherapy success occurs has not been well understood. Furthermore, the use of high frequency electric particle 'field energy' can cause ionization and do severe damage to nearby healthy tissue. By using lower frequency electric particle 'field energy' at the speed of light c , which will not damage healthy

tissue by ionization, much of this collateral damage can be avoided.

The new understanding of the mechanism which underlies the success of the proposed alternative treatment is that an appropriate input of electric particle 'field energy' at the speed of light c , can cause the 'field energy' in the radiosensitive tumor to be brought up gradually to that of normal tissues. Care is, of course, taken to avoid heating the tissue to the point of killing the healthy cells, or prolonging treatment so as to cause any other electromagnetic damage to normal tissue.

When the electric particle 'field energy' of the cancerous tissue has been normalized in 'field energy,' the "message" carried by the DNA of the tumor can be understood by the body's immune system and the cells can 'communicate' with other pharmaceutical treatments or be marked as pathogenic for destruction by the immune system. This is not a matter of "killing" the cancer cells either by heat or high frequency energy damage.

Examples of Treating Cancer Successfully

Seven years ago, Dr. David Lloyd, consultant liver surgeon at the Leicester Royal Infirmary and clinical tutor in surgery at the University of Leicester Medical School, in the UK, came up with the idea of placing a tiny probe into liver tumors to irradiate them with microwaves. To date, more than 100 patients diagnosed with inoperable terminal liver cancer have been treated with the technique, often in combination with chemotherapy, and in 95 percent of these patients the cancer disappeared ("Life-saving"). One of these patients, Maureen Horney from Sussex, said:

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

According to Dr Lloyd:

The microwave machine which has been developed at UHL can treat very large tumors 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. ("Life-saving")

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 Hepatobiliary Association, and the World Congress of Liver Surgery meeting in Las Vegas, USA, in September 2007.

This same method could be used for breast cancer in cases where the tumors are sufficient in size for insertion of a small metal probe. Most recently, the Oklahoma University Cancer Institute in the USA has introduced 'focused microwave thermotherapy' for the treatment of breast cancer, which is said to reduce the number of women needing a breast removed by up to 90 per cent ("Breakthrough"). This research is in the early stages, and I would assume from the use of the word "thermo" that the researchers think they are seeing a thermal effect, which in due course is likely to be viewed as a mistake. However, understanding the vibrational effect of microwave on sub-atomic particles is a very new concept, which may not yet have become available for study by these researchers.

The Indiba MD-308 is another instrument being used for low energy 'electric field' treatment for tissue with slower than normal electric particle 'energy field'. It is a non-invasive instrument utilizing 200 watts over 50 ohms, at 500 kHz. Indiba medical equipment has been used extensively by Dr. Adolfo Ley-Valle from Barcelona, and it has a respected safety record (Ley-Valle).

Light itself can be used to treat successfully radiosensitive cancers (that is, those cancers with slower than normal electric particle 'field energy') on the surface of the skin, or within the lungs, where in either case there is easy access to apply the treatment known as Photodynamic Therapy (PDT) ("Photodynamic"). After sensitizing the skin cancer to light, followed by irradiation with a suitable wavelength of laser light, which is comprised of electric particle 'field energy' at the speed of light c , the slower moving electric particle 'field energy' of the atoms of the cancer cells becomes elevated in 'field energy' speed towards the 'normal' electric particle 'field energy' speed of light c .

Dr. Jeremy George of University College London Hospital has utilized PDT to treat lung cancer with success. A camera is inserted into the lungs of the cancer patient together with a blue light suitable for detecting tumors. Normal lung tissue will reflect back the bluish light; however, the cancer tissue, with the slower electric particle 'field energy' speed, will induce the red/mauve spectrum of visible light. In this way the tumors become easily identifiable to the doctor treating the patient. Interestingly, blue laser light is also being used during cancer surgery to check the edges of removed tissue to see whether or not all cancerous tissue has been removed.

When the electric particle 'field energy' of the 'base pair' atoms comprising the DNA of the cancer cell has been elevated to the normal 'field energy' speed of the electromagnetic spectrum, the body is able to:

- decode the information associated with the cell
- recognize the cancer cell as foreign and

- mark the cell, to be destroyed by the immune system.

Summary

The new designation, 'radiosensitive cancers', has been given to those cancers that can be treated successfully with an appropriate application of electric particle 'field energy' at the speed of light c . These cancers reflect a condition, where the electric particle 'field energy' of a substantial number of atoms comprising the cells of the tumor, operate at a speed which is slower moving than the 'normal' speed of light c . The latter normal speed is the 'field energy' speed shared by all of the frequencies of the electromagnetic spectrum, i.e. the speed of light c . Those cancers that are not radiosensitive are being called radioresistant. They have normal electric particle 'field energy,' and are formed through ionization or genetic inheritance. Their electric particle 'field energy' is that of the speed of light c .

The Future

Obviously, this brief glimpse at a new understanding of the subatomic abnormality of most breast cancers, their diagnosis and treatment, based on a new understanding of subatomic physics, cannot answer all questions which the reader might have. There will be many more useful insights developed, clarifying the genesis and treatment of other cancers and diseases which that resist today's medical treatment modalities.

What is most needed now is openness on the part of the medical regulators and clinical physicians to allow for guided experimentation with this most promising medical breakthrough. Robert Wood-Smith stands ready to help those who wish such guidance, asking only for his out-of-pocket expenses. It should make sense to have a knowledgeable physicist, who has discovered this mechanism, guide the experiments to utilize this knowledge for its healing potential. Double-blind clinical trials need to be launched and women need to be helped to realize that breast cancer need not be the scourge which burdens families with years of suffering and cuts short women's lives.

There are also implications for the nuclear commercial and weapon industries that could not be sufficiently fleshed out here. Radiation Protection Standards, set on the assumption that the only radiation related cancers were those due to ionization will need to be updated to account for the inordinate effect of internal contamination with unstable atoms which emit particles with slower electric particle 'field energy' than that of normal living cells. This subatomic vibrational effect of radioactive alpha, beta and gamma particles was not foreseen by those who set the radiation standards in 1950 (Mayneord)!

Future research will need to apply this new understanding of radioactive particle affects to proteins, bacteria and

viruses, and to intra and intercellular communication in higher organisms, including animals and humans. This new understanding will require profound examination of long accepted radiation protection policies, especially for internal exposures, which are now known to be non-protective of living things.

While new avenues of healing are opened up, old counterproductive policies must be changed: both changes will have significant effects on the lives of ordinary people. We can expect these changes to take place at different rates geographically and in time, but they give hope of a much healthier future for the living beings on planet Earth.

Dr. Rosalie Bertell has received numerous awards and nine honorary Doctorate degrees since launching the International Institute of Concern for Public Health (IICPH) in 1984, an attempt to institutionalize her growing concern for human survival on an intact planet. Author of Handbook for Estimating the Health Effects of Ionizing Radiation (1984, 1986) and the popular non-fiction book: No Immediate Danger: Prognosis for a Radioactive Earth, together with more than a hundred articles, book chapters and poems, Dr. Bertell has reached medical, scientific, and popular audiences around the globe. She is a member of the Grey Nuns of the Sacred Heart.

¹See a special forum on the radiation effects controversy in *The Bulletin of the Atomic Scientists* (Tamplin and Gofman 1970).

²A free electronic copy of Robert Wood-Smith's report is available at fundamental_physics@talktalk.net

³See also Heather Muir's 1996 article in *New Scientist* ("Heart").

⁴For a full report on this discovery, see Ebbesen et al.

⁵There are about three billion base pair in the human DNA, which carry the genetic information and triggers. Some are affected by interaction with toxic chemicals endemic in our environment which singly or in combinations expose the DNA to low-level radioactivity within the natural environment.

⁶The treatment of these radioresistant cancers is beyond the scope of my present discussion and would require a separate paper.

⁷The Biofield Diagnostic System has been developed and tested by the world's leading breast cancer specialists. It has been developed to make mammograms and all other current breast cancer diagnostic technologies obsolete in the next generation. Biofield Corp., currently partnering with MacKay Life Sciences, is located in King of Prussia, PA. [King of Prussia Business Center, Suite C, 1019 West Ninth Ave., King of Prussia, PA, United States.]

⁸Physical examination of the breast has 71-80 percent sensitivity and 20-40 percent specificity; ultrasound has 60-80 percent sensitivity and 34-74 percent specificity; diagnostic mammography has 78-90 percent sensitivity and 20-40 percent specificity; Biofield has 90-95 percent

sensitivity and 40-65 percent specificity. Only Biofield Diagnostic System and Trimprob provide objective information on breast cancer.

⁹On 21 July 2003, Trimprob, Tissue Resonance Interaction Method, a hand-held, portable, quick, non invasive cancer detection tool was introduced in the United States at a Washington D.C. press conference. Similar to a metal detector used to frisk airline passengers, Trimprob is a light-weight (1.3 pounds) plastic baton that produces a beam of microwaves. It is based on patented technology discovered in Italy by physicist Clarbruno Vedruccio and developed by a defense company Galileo Avionica, a subsidiary of Finmeccanica S.p.A., Italy's largest defense and aerospace group with annual revenues of approximately \$8.5 billion.

References

"Breakthrough Breast Cancer Therapy Reduces Mastectomies; Saves Breast." The University of Oklahoma Health Sciences Center. Press release January 15, 2010. Web. 29 Jan. 2011. <<http://www.ouhsc.edu/article-display.asp?idnum=1497>>.

Chown, Marcus. "Tight Fit: Sloshing Electrons Help Light Wiggle Through the Most Minute Gaps." *New Scientist* 14 February 1998.

Ebbesen, T. W. and H. J. Lezec, H. F. Ghaemi, T. Thio and P. A. Wolf. "Extraordinary Optical Transmission Through Sub-Wavelength Hole Arrays." *Nature* 391 (February 1998): 667-669.

Egan, Robert L. *Mammography*. Springfield, IL: Thomas, [1964] 1970.

Flexner, Abraham. *Medical Education in the United States and Canada*. New York: Carnegie Foundation for the Advancement of Teaching, 1910.

Glanz, James. "Physics: Collisions Hint That Quarks Might Not Be Indivisible." *Science* 9 February 1996: 758.

Ley-Valle, A. "Non invasive intracranial hyperthermia with Electric Capacitive Transference-ECT-(*) Intratumoral and Cerebral Thermometry Results." *Neurocirugia* 14 (2003): 41-45. Web. 29 Jan. 2011. <<http://www.revistaneurocirugia.com/web/artics/v14n1/5.pdf>>.

"Life-saving cancer treatment pioneered in Leicester an international success." University Hospitals of Leicester. Press Release 447, 28/06/2006. Web. 29 Jan. 2011.

<<http://www.uhl-tr.nhs.uk/formedia/press-releases>>

Mayneord, M. V. "The Organization of Protective Measures Against Radiation Hazard." *Biological Hazards of Atomic Energy*. Ed. A. Haddow. Oxford: Clarendon Press, 1952.

Muir, Hazel. "Heart of Quarkness: Just When We Thought We Were On Top of the Subatomic World, Strange Noises Are Emerging from Chicago." *New Scientist* 11 May 1996: 29.

Muir, Hazel. "Science: May the Fifth Force Be With Us?" *New Scientist* 1 March 1997: 14.

“Photodynamic Therapy and Cancer (PDT).” University College London Hospitals. Web. 29 Jan. 2011. <<http://www.uclh.nhs.uk/OurServices/ServiceA-Z/Cancer/cancertreatment/PDT/Pages/Home.aspx>>.

Tamplin, Arthur R. and John W. Gofman. “The Radiation Effect Controversy.” *Bulletin of the Atomic Scientists* 26 (7) (September 1970): 2-18.

Wood-Smith, Robert and Partners. “Medical Science is in Crisis Worldwide.” *Authoritative Advisors in Radiation and Genomic Instability*. 2002. Copy available upon request.

MARY TRAFFORD

welcome to cancerland

*Inspired by an article by
Barbara Ehrenreich*

you were warned:

maybe if you'd been more careful
this wouldn't've happened
though I/you/they/we
will never know which
noxious substance / faulty gene / toxic
chemical
pesticide/ herbicide/vaccine/drug / or if
a childhood spent in second- and third-hand
smoke
(or that Export A you stole at age 10
from your sleeping uncle's pocket, smoked
with your cousin in the bathroom
even though the window was open, maybe
that)
started it all

that's what happens when
a naughty girl
gets caught:
a leg-hold trap
that never lets go

*welcome to cancerland, little girl
now sit still
while I chew your leg off.*

*A two-time cancer survivor living in Chelsea, Quebec,
Mary Trafford Draws poetic inspiration from teammates
on Busting Out, a breast-cancer survivors' dragon
boat team. She received the 2002 Diana Brebner Prize
for Poetry.*

ABOUT THE GUEST EDITORS...

Brenda L. Blondeau is a Ph.D. candidate in the Women's Studies Graduate Programme at York University, Toronto, Ontario where she is completing her dissertation. Currently, she teaches in the School of Women's Studies Bridging Program, and instructs in the Writing Department. Her research interests include women's narratives, incest and other forms of violence against women, the long term effects of trauma on women, the impact of working with difficult knowledge, and feminist theory and methodology. She has presented personal/political narratives at a variety of conferences in Canada and the UK, and has published work in the *Canadian Woman Studies* journal and in *The Narrative Practitioner Conference Proceedings* (Wrexham, Wales). Her connection to this special issue of “Women and Cancer” is as a woman and researcher who has personally and peripherally experienced the impact of cancer.

Lykke de la Cour teaches in the Health and Society Program in the Department of Social Science at York University. She has published articles on the history of women in the medical and psychological professions, in Ontario, and women's perceptions of psychiatric institutionalization. Her area of research focuses on the historical and the contemporary experiences of women with disabilities.

Eva C. Karpinski has a Ph.D. in English from her native Poland, and a Ph.D. in Women's Studies from York University in Toronto. She has lived in Canada for twenty-two years. She teaches courses on narrative, cultural studies, translation studies, and feminist theory and methodology in the School of Women's Studies at York. She has published articles in such journals as *Literature Compass*, *Men and Masculinities*, *Studies in Canadian Literature*, *Canadian Woman Studies*, *Atlantis*, *Canadian Ethnic Studies*, and *Resources for Feminist Research*. She is also editor of *Pens of Many Colours: A Canadian Reader*, a popular college anthology of multicultural writing. Her book *'Borrowed Tongues': Life Writing, Migrancy, Translation* is forthcoming from Wilfrid Laurier University Press in 2011. It is based on her doctoral dissertation that was supervised by Barbara Godard.

Gosia Wasniewski has training in clinical and applied psychology both from Poland and Canada. Her professional experience includes teaching and clinical work in the community agencies and hospitals. For the last 15 years she has been working as a clinician at the University Health Network in the areas of addictions and mental health.