

**On the Enhanced Neutrino and Anti-Neutrino Interactions
by Positron, Electron and Nucleon Interaction under Applied Static
and Dynamic Magnetic Fields: Theoretical Cure for HIV**

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Abstract

In 2018, it was proposed by RBL that HIV fractionates some isotopes during its infection, dormant stage and advancement to AIDS. In 2023, scientists led by Balter measured fractionation of Zn isotopes during HIV infection and advancement of the disease, whereby the HIV and the HIV infected cells enrich in the least massive stable Zn isotope: ^{64}Zn . Surrounding media of the HIV infected cells enriches in the heavier stable isotopes: ^{66}Zn , ^{67}Zn , ^{68}Zn and ^{70}Zn . The author (RBL) previously proposed general mechanism of feeding viruses particular enriched isotopes and use of electromagnetic fields, magnetic fields, electric fields and agitations for inducing isotopic replacement during proliferation of the virus and infection to mutate and inactivate the virus. This work outlines details of application of such for intrinsic light isotopic enrichment of unstable ^{62}Zn into HIV and HIV infected cells with the rapid electron capture reactions transmuted the ^{62}Zn to ^{62}Cu and to ^{62}Ni for altering interactions of zinc fingers and other binding of zinc in HIV and HIV infected viruses to kill the HIV infected virus and inactivate the HIV with specific emphasis on previously hidden HIV reservoirs. These hidden HIV reservoirs contain Zn fingers and this theoretical cure internally mutate and inactivate these hidden HIV reservoirs throughout the patients' bodies by nuclei of ^{62}Zn , ^{62}Cu and ^{62}Ni . This work further proposes additional treatment of HIV infected host with excessing ^{64}Zn in the HIV and HIV infected cell with external rotating magnetic waves of electromagnetic radiation (including X-rays, Gamma Rays and Radio Waves), strong static magnetic fields, positrons and neutrinos and antineutrinos for positron induced selective mutations of ^{64}Zn to inactivate the HIV and kill HIV infected cells for an additional route to cure HIV. The author introduces new phenomena whereby positrons interacting with electrons in strong magnetic fields and nuclei for inducing stronger neutrino and antineutrino interactions.

Introduction

In 2018, the author (RBL) wrote a book wherein it was proposed that multiple stable isotopes of nonzero nuclear magnetic moments (NMMs) play essential roles in living organisms [1]. Prior scientists [2-6] had reasoned nuclei with spin angular momentum could in some instances be involved in life and affect biomolecules and organisms thereby, but RBL first in 2002 proposed a nuclear orbital angular momentum with such nuclear spin angular momentum as expressed by NMMs and the import of parity of

NMMs by positive and negative NMMs by bare protons and bare neutrons [7]. On the basis of such, RBL later in 2013 proposed unusual isotopic distributions in molecules can cause diseases [8]. In 2018, in his book, RBL proposed that HIV and some other viruses fractionate stable isotopes for the origin of the viruses and infectivity and advancement of the HIV and some other viruses [1]. In 2023 a group of scientists led by Dr. Vincent Balters in France [9] proved that RBL theory of HIV fractionating stable isotopes is correct as Balters et al. measured HIV infecting cells fractionates zinc isotopes with HIV infected cells enriching in ^{64}Zn and the HIV virus in the infected cell expressing similar ^{64}Zn enrichment. These scientists led by Balters [9] measured the surrounding media and non-HIV cells enriching in heavier zinc isotope ^{66}Zn , ^{67}Zn and ^{68}Zn . In 2024, the author (RBL) developed more his theory from March 2020 of using static magnetic fields, electric fields and electromagnetic waves to stimulate the virus in this case HIV in presence of feeding particular stable isotope (in this case ^{64}Zn and ^{62}Zn for HIV) to induce mutating the virus, in this case mutating the HIV virus and killing HIV infected cells. Later in 2025, RBL further introduced use of positron irradiation with neutrinos and antineutrinos, static magnetic fields and magnetic waves of electromagnetic radiation for enhancing the neutrino and antineutrino interactions selectively with ^{64}Zn to stimulate the ^{64}Zn thereby for inactivating the HIV and killing HIV infected cells. RBL thereby in this work introduces his new theory of positrons enhancing electron neutrino, nuclear (in particular nuclei of nonzero nuclear magnetic moments [NMMs]), nucleon interactions for new mechanism for enlarging neutrino and antineutrino matter interactions. This work outlines details of curing HIV thereby.

Theory for Curing HIV

It is good at this point to note the author previously noted in reference [1] use of nonprimordial isotopes (of ^2D , ^{13}C , ^{15}N , ^{17}O , ^{18}O , ^{25}Mg , and ^{33}S with nonzero NMMs) for treating and possibly curing HIV. Here the author briefly develops such possible HIV treatment in more detail. Current HIV medication can reduce HIV virus in blood below detectable levels, but the residual HIV engraved in the immune nucleic acids of immune molecules provides a reservoir that can allow re-development if the medication is stopped [10]. The author here notes the possibility of eliminating HIV in such reservoirs theoretically by using zinc (Zn) isotopes (of differing NMMs), neutrons, positrons and neutrinos and antineutrinos from nuclear reactors and nuclear waste. It was previously predicted by this paper that HIV fractionates stable isotopes during infectivity and advancement [1]. It is known that HIV infection fractionates Zn isotopes [9]. The HIV infected cells accumulate zinc and enrich the lighter isotope of Zn or ^{64}Zn . The surrounding media enriches heavier isotopes of ^{66}Zn , ^{67}Zn , ^{68}Zn and ^{70}Zn . Such sensitivity of HIV proliferation and infection from undetectability by reservoirs are used here by the author to possibly cure HIV. By the author's theory [1, 11], Zn isotopes have nuclei that are half between magic number stable nuclei and such gives Zn nuclei proclivity to neutrino and antineutrino stimulations. The author here predicts antineutrino selectively stimulating ^{64}Zn nuclei in HIV infected host for disrupting the HIV and HIV in reservoirs for potential cure for HIV in theory. The author enhances the weak neutrino nuclear interactions by using strong external static magnetic fields, dynamic magnetic fields of electromagnetic radiation, and positron irradiation. The source of the antineutrino can be a nuclear reactor or nuclear waste undergoing fission reactions and releasing antineutrinos. The use of new neutrino generating technology can be a source of neutrinos for irradiating HIV patients; patients may also be lifted to outer space for exposure to solar neutrinos and intrinsic positrons from outer space. The author here notes such positrons and solar neutrinos by his theory in outer earth orbit like space station can explain the acceleration of evolution of bacteria and other microbes observed on international space station. The HIV hosts and patients can be protected from dangerous radioactive particles by thick lead shields. Here on earth HIV patients may be

irradiated with neutrinos and antineutrinos near nuclear reactors with supplying positrons and dynamic magnetic fields and static magnetic fields to enhance the neutrino cross-sections for interacting with the ^{64}Zn to inactivate the HIV and kill HIV infected cells selectively. But the neutrinos and antineutrinos pass through the lead shield as they are not reactive and scattered well by the stationary atoms in the lead shield. But by the author's theory, the neutrinos and antineutrinos by their wave natures have fractional interactions with dynamical biomolecules in living organisms so the antineutrinos can fractionally interact with the ^{64}Zn isotopes in the HIV and HIV in reservoirs to disrupt the HIV and possibly cure the HIV.

The Author (Reginald B. Little, RBL) here introduces a new mechanism of enhancing neutrino and antineutrino interactions with atoms and nuclei (in particular nuclei of nonzero Nuclear Magnetic Moments [NMMs]) under positron irradiation, applied external static magnetic fields and rotating dynamic fields of electromagnetic radiation. The author (RBL) develops this enhanced mechanism of neutrino and anti-neutrino interaction with atoms on basis of the positron being anti-matter and its properties of having positron having same mass as electron but opposite charge and opposite spin direction and tendency of positron to collapse to energy and the acceleration of the fragments of the positron and electron as they fragment to relativistic speeds of the tiny pieces. The author (RBL) reasons as outlined here that the fragmentation of the lepton and anti-lepton during their annihilation approaches the mass spin and symmetry of neutrinos and antineutrino and such fragmentation and approach to neutrino and antineutrino mass and size are reasoned by the author (RBL) to cause the annihilating electron and positron to strongly interact with surrounding neutrinos and antineutrinos. The author (RBL) reasons that irradiating positrons into substances having nuclei of nonzero NMMs may present strong magnetism of electrons near such nuclei and the applied static magnetic field can polarize the positrons with electrons near the nuclei of nonzero NMMs to prevent the rapid annihilation of the positron and electron near the nuclei of non-zero NMMs for prolong electron and positron interactions for prolong interacting with bombarding neutrinos and antineutrinos for more strongly inducing the electrons and positron interactions with the neutrinos and/or antineutrinos and nuclei for thereby enhancing the neutrino and antineutrino interactions with the nuclei and atoms. RBL further reasons that rotating dynamic magnetic fields of the applied electromagnetic radiation may selectively drive such positron, electron, nuclei interactions for particular nuclei of particular nuclear magnetic moment (NMM). On such basis, the author (RBL) here introduces use of positron irradiation and neutrino and/or antineutrino irradiation on HIV patients under static and dynamic magnetic fields of Possibly Gamma Rays, X-rays and radio waves for selectively stimulating inherent ^{64}Zn in the HIV cells to inactivate HIV and kill HIV infected cells for curing HIV. By the author's mechanism as introduced here, the author (RBL) introduces a reason for the matter and antimatter imbalance in the Universe on the basis of matter using positrons (antimatter) to enhance proton and electron interactions with antineutrinos to produce neutrons and neutrinos for transmuting lighter elements in stars to heavier elements.

Second Approach

In a second approach, the author (RBL) propose using gamma rays to irradiate HIV host for selective inducing resonance in the ^{64}Zn to selectively stimulate ^{64}Zn enriched HIV infected cells and ^{64}Zn enriched zinc fingers in the HIV virus and capsid in such infected cells for altering the biochemistry by the gamma stimulating of ^{64}Zn in the HIV infected cells and HIV therein for killing the infected cells and mutating the HIV in the cells and even in hard to reach reservoirs. High levels of gamma rays of course can lead to cancer while trying to stimulate the giant dipole resonance of ^{64}Zn . But it has been known for years that ^{64}Zn is a special nuclide for manifesting giant dipole resonance [12]. The author in this document further introduces use of positrons and strong magnetic fields and dynamic magnetic fields of electromagnetic waves for enhancing the gamma induced activation of the ^{64}Zn intrinsically enriched in the HIV and HIV infected cells for inactivating the HIV and killing HIV cells for curing HIV.

Third and Most Successful Approach

In addition to these two approaches, the author (RBL) reasoned for a third approach with greater confidence, no external gamma rays, and a better likelihood of success for curing HIV with fewer side effects. The third approach by the author's (RBL) theory for curing HIV involves feeding the patient or injecting a digestible compound having ^{62}Zn . ^{62}Zn is readily available in the industrial radionuclide industry [13]. ^{62}Zn (with 0 nuclear spin and NMM) is unstable and will undergo nuclear reactions with half-life of 9.22 hours by electron capture and antineutrino capture and inverse beta process to form ^{62}Cu . The author here further proposes exposing the ^{62}Zn fed HIV patient with positrons in static magnetic fields and dynamic magnetic fields of electromagnetic waves for enhancing antineutrino and neutrino interactions with the ^{62}Zn , ^{62}Cu and ^{62}Zn involved in this treatment for increasing HIV inactivation and killing HIV infected cells. The ^{62}Cu with spin = 1 and -0.38 NMM will severely alter binding of the zinc finger to inactive HIV and likely kill HIV infected cells for curing HIV as the ^{62}Zn to ^{62}Cu will alter Zn binding in the HIV infected cells and in the zinc fingers of HIV itself. Such will not affect normal cells as the normal cells are intrinsically enriched with heavier isotope ^{66}Zn . The HIV intrinsically during infection and advancement to AIDS depletes normal cells of zinc and ^{64}Zn leaving the normal cells with heavier zinc isotopes ^{66}Zn , ^{67}Zn , ^{68}Zn and ^{70}Zn . The author (RBL) reasons that perhaps the heavier Zn isotopes bind more strongly in normal cells as the HIV takes over the cells so the less massive Zn isotopes having weaker binding are more rapidly taken up and used by HIV. So the less massive ^{64}Zn enriches the HIV and HIV infected cells. The unstable ^{62}Zn is hypothesized here by the author to also enrich in the HIV cells as the stable light ^{64}Zn enriches due ^{62}Zn also having lower mass number, fewer neutron and 0 NMM. The author reasons that such properties of ^{62}Zn like ^{64}Zn cause preference for Sulfur in Cysteine in zinc fingers of HIV as it evolves, develops and advances. The heavier Zn isotopes (^{66}Zn , ^{67}Zn , ^{68}Zn and ^{70}Zn) prefer Oxygen and Nitrogen binding in histidine and aspartic acid [9].

By the author's (RBL) theory the transmutation to Cu in this HIV cure is not harmful overall to the patient as trace Cu is a nutrient in humans. But the ^{62}Cu (with its nuclear spin = 1 and -0.38 NMM) is unstable and has half-life of 9.74 minutes and it transmutes by electron capture to ^{62}Ni which is stable and magnetic. The change from Zn to Cu to Ni (with change from nonmagnetic to magnetic valence electronic shell) will severely alter the binding of proteins and RNA in the zinc fingers in the HIV infected cells and in the HIV in those cells and especially in the trace HIV hidden reservoirs that have been hard to reach by other scientists. This new theoretical cure given here by the author (RBL) reaches all those hidden HIV reservoirs and internally by nuclei and internal nuclear pressures inactivates all hidden reservoirs. The author (RBL) here introduces the solution to the HIV reservoir problem that has stumped scientists and doctors for last 20 years as the author (RBL) solves the reservoir problems internally by transmuting the metal centers in these hidden reservoirs in an innocuous way (to surrounding organs and tissues) to but inactive the HIV reservoirs but not cause vast harm to surrounding organs and tissues and the patient. Such altered binding of amino acids and altered protein structures and interactions with nucleic acid and other biomolecules by transmuting the Zn to Cu and then to Ni will sicken HIV infected cells and inactivate HIV even in the hidden HIV reservoirs! The intrinsic nature of HIV to harbor and enrich ^{64}Zn and ^{62}Zn inherent limits such inactivation of Zn sites to HIV and not affect normal cells. The transmutation to ^{62}Ni causes stability as ^{62}Ni is a stable isotope of Ni. Such stability in forming ^{62}Ni ends the internal induced electron captures and nuclear transmutations forming a stable product within minutes and hours with no further transmutations for less probable large scale radiation damage from internal nuclear reactions. Trace nickel in the human body is not toxic as humans are constantly exposed to trace amounts of Ni in foods. But accumulation of Ni in the body over long periods of time can cause toxicity and health effects like lung fibrosis, kidney

disease and cardiovascular disease. But this cure of HIV involves ^{62}Zn and intermediate ^{62}Cu which have half-lives of 9.22 hours and 9.74 minutes so the treatment will not be prolonged maybe in a few days for cure before high levels of nickel generate in the patient for affecting lung, kidneys and cardiovascular organs. The author notes the relatively short but sufficient half-lives of these transmutations are rapid enough to mutate the HIV and HIV cells before they can uptake fresh ^{64}Zn , but not too slow for prolonged accumulations and transmutations side effects.

It is important to note that this cure may also involve ^{61}Zn and ^{60}Zn rather than ^{62}Zn . It is currently unknown whether ^{62}Zn , ^{61}Zn or ^{60}Zn will accumulate in HIV infected cells and HIV itself (but enrichment is hypothesized for these less massive unstable zinc isotopes in HIV and HIV infected cells). The trend of lower mass numbers and neutron deficiency of ^{64}Zn (zero nuclear spin and 0 NMM), ^{62}Zn (zero nuclear spin and 0 NMM), ^{61}Zn (+3/2 nuclear spin and 0 NMM) and ^{60}Zn (zero nuclear spin and 0 NMM) encourages the author (RBL) to hypothesize that one or all of these unstable isotopes (^{62}Zn , ^{61}Zn or ^{60}Zn) will behave as ^{64}Zn and accumulate in the HIV infected cells and HIV itself. The author reasons that the +3/2 nuclear spin of ^{61}Zn may cause different interactions of ^{61}Zn with HIV infected cells and HIV itself relative to the favorable interactions and enrichment of ^{64}Zn with HIV infected cells and HIV itself. RBL here first points to ^{62}Zn for this HIV cure as ^{62}Zn has longer half-life (but not too long) of 9.22 hours for its effective circulation in the patient and greater uptake by HIV cells and HIV itself for transmuting to ^{62}Cu and ^{62}Ni to kill the HIV cells and inactivate the HIV for curing the HIV. The ^{61}Zn and ^{60}Zn have shorter half-lives of 1.485 minutes and 2.40 minutes, respectively; so the author (RBL) thinks the ^{61}Zn and ^{60}Zn will transmute before they are up taken into HIV and HIV infected cells after administering to HIV patient.

The ^{61}Zn (with its 3/2 spin and 0 NMM) that does get into HIV zinc fingers is transmuted to ^{61}Cu by electron capture to inactivate the HIV and kill the HIV infected cells. The ^{61}Cu (and its 3/2 nuclear spin and 2.14 NMM) is unstable with half-life of 3.35 hours and ^{61}Cu transmutes by electron capture and antineutrino capture to magnetic ^{61}Ni (with its nuclear spin of 3/2 and -0.75 NMM), which is stable, has magnetic valence electronic shell and has negative NMM that will alter bonding in the zinc fingers to inactivate HIV and kill HIV infected cells for those few ^{61}Zn that do get into HIV and HIV infected cells. The ^{60}Zn (with its 0 nuclear spin and 0 NMM) is unstable and transmutes to ^{60}Cu by electron capture and antineutrino capture. ^{60}Cu (with its nuclear spin of 2 and 1.219 NMM) is unstable with half-life of 23.7 minutes and transmutes to ^{60}Ni by electron capture and antineutrino capture. The ^{60}Ni is also stable, magnetic and has 0 NMM and nuclear spin of 0. The electron captures are involved in all these processes and involve large intrinsic pulling in antineutrinos under static and dynamic magnetic fields and positron irradiation for electron and proton to form neutron internally. The author reasons an induced large cross-section for antineutrinos and neutrinos by the static and dynamic external magnetic fields and positron irradiation for sub-hydrogen distances of electron and proton or compressed hydrogen bonds [14]. The electron capture processes may lead to Bremsstrahlung emission having x-rays, gamma rays and Auger electrons within the zinc fingers and zinc binding cysteines in the HIV and HIV infected cells. But such radiation will be sporadic and brief. Such can kill the infected HIV cell in which the electron capture occurs and also locally inactivate HIV within hidden hard to reach HIV reservoirs to CURE HIV! But such radiation is sporadic and not over the whole body like external flux of gamma rays like the prior approach.

In this work the author further (based on his reasoned cure of HIV by neutrino and antineutrino interactions with zinc isotopes by enhanced neutrino and antineutrino interactions by positron irradiation and static and dynamic magnetic fields of electromagnetic radiation) introduces a mechanism for the mutation of SIV during the 1920s to become deadly in chimpanzees in Africa and cross over of SIV to HIV for first human infections in Congo Africa by the author (RBL) reasoning [16] the mining of

uranium in this part of the world during 1940s and 1950s induced the mutations of SIV and HIV and cross over for the HIV development in humans [16].

Prostate cancer is different as it does not manifest the Warburg Effect as many other cancers do, at least early in prostate cancer's genesis. This is noted by this short review of important theories of cancer as the elephant in the room; see { Prostate cancer - A new explanation - PART 1 }. Here I, Reginald B. Little (RBL) would like to add my theory of cancer (by alteration of stable isotopes of ^2D , ^{13}C , ^{15}N , ^{17}O , ^{18}O , ^{25}Mg , ^{33}S , Na isotopes, K isotopes, Fe isotopes, Ca isotopes, Zn isotopes, Cu isotopes, Cl isotopes, and/or Iodine isotopes according to RBL's theory of cause of cancer) for a new perspective of the origin of cancer that can empower many aspects of these older theories of cancer as well as provide new aspects of the origin of cancer. Here I would like to give some incite in addressing this elephant in the room for unusual nature of prostate cancer relative to other cancers. By RBL's stable isotope theory, the elephant in the room can be addressed based on the prostate being very different from other organs and tissues in the body. In particular, the prostate is more concentrated in Zn relative to most other organs in human anatomy. Also, Cu is relatively lower in concentration in healthy prostate cells. Thereby by RBL's theory the unusual physiology of prostate in developing cancer can be understood by alterations in isotopes of Zn in the prostate. I have already noted this in a prior archive; see page 86 of { Induced Nuclear Magnetic Moments and Spins for Transient Coupling to Electronic Orbitals: Relation of Magic Number Nuclei to Biochemistry, [vixra.org](http://vixra.org/e-Print/2402.0062) e-Print archive, vixra:2402.0062 }. Here I would like to note that the ^{64}Zn has been measured to enrich in the urine from the cancer not the cancer cells themselves. Thereby my model the smaller negative NMM of ^{64}Cu from ^{64}Zn relative to ^{66}Cu from ^{66}Zn causes stronger partial covalent bonding of ^{64}Zn to ^{15}N of negative NMM relative to weaker partial covalent bonding of ^{64}Zn to ^{14}N of positive NMM. By the theory of RBL, the ^{64}Zn would enrich ^{15}N in the cell to suppress cancer. I note in my model anti-neutrinos can reversibly induce ^{64}Zn to ^{64}Cu to ^{64}Ni and antineutrinos can reversibly transduce ^{66}Zn to ^{66}Cu to ^{66}Ni . Also the ^{64}Zn would interact weaklier with ^{13}C to less enrich ^{13}C in the normal cells to cause cancer. Thereby I refine my model here whereby it explains the ^{64}Zn in prostate cells suppressing cancer and the genesis of cancer by depleting ^{64}Zn and enriching prostate cells with ^{66}Zn , which more depletes ^{15}N and enriches ^{13}C in prostate cells to induce their prostate cancer origins. It is important to note that as prostate becomes cancerous it concentrates more in Cu ions. My isotope theory here by the Zn interacting with antineutrinos reversibly to transmute to Cu intermediates can provide mechanism for Zn reversibly transmuting to Cu intermediates to temper enzymatic alterations and genetic alterations for the cells to undergo in their transitions from normal cells to cancer cells.

Quite interestingly, I also recently published a paper noting use of Zn, Cu, Ca, Ag and some other isotopes for treating and possibly curing HIV, coronaviruses and other viruses in general. See my article { View of Possible Treatment of Coronavirus and Other Viruses by Stable Isotopes and Electromagnetic Fields and Waves }. Here I would like to note the power of my theory as it not only gives new perspective on HIV but integrates my new isotope theory for diseases so that cancer is also accounted in a complementary way. I note above ^{64}Zn depleting in prostate cancer by my theory. Such depletion of ^{64}Zn in prostate cancer complements ^{64}Zn enriching in HIV infected cells as was recently observed and explained by the isotope theory of Reginald B. Little (RBL). The complementary theoretical roles of ^{64}Zn depletion causing prostate cancer and ^{64}Zn enrichment leading and involved in HIV infecting cells is legitimized by recent measurements demonstrating that

people with HIV have much power probability of developing prostate cancer. By RBL isotope theory the HIV intrinsically enriches ^{64}Zn in the cells and HIV plays a large role in prostate and the viral enrichment of ^{64}Zn by RBL's theory thereby guards against the prostate cells becoming cancerous (whereby ^{64}Zn is depleted).

Thereby here, I not only want to encourage you of the soundness of my isotope theory of cancer but also further impress upon you the power of such isotope theory for new approach for understanding the virial cause of AIDS and HIV. Moreover, I present not only isotope theory for origin of cancer but also isotope theory for origin of HIV. Finally, I motivate your interest in my isotope theory for understanding the origin and natures of these diseases current impacting humanity by offering pathways to new treatments and possible cures of cancer and HIV. So by my theory, I noted antineutrinos induce transient transformations of ^{64}Zn and ^{66}Zn to isotopes of Cu and Ni and these intermediates altering enzymes and DNA and RNA for internal cellular biochemistry for transforming normal prostate cells to cancer cells. Thereby I predict people with more proclivity for prostate cancer may exposed to more chemical and/or nuclear environment driving depletion of ^{64}Zn in their prostate. But what about HIV here I would like to develop more my theory of HIV being a virus that evolved to enrich cells with ^{64}Zn and this causing its long incubation time of the HIV infection. See { View of Possible Treatment of Coronavirus and Other Viruses by Stable Isotopes and Electromagnetic Fields and Waves }

But how did this HIV virus mutate so it enriched cells with ^{64}Zn . By my theory in prior publication {View of Possible Treatment of Coronavirus and Other Viruses by Stable Isotopes and Electromagnetic Fields and Waves}, I noted antineutrinos can be used to selectively fractionally transmute ^{64}Zn inherently enriched in HIV infected cells. Here I further developed the origin of HIV further supporting my theory by proposing that unusual anti-neutrino conditions caused the virus that we now know as HIV to evolve from some other viruses in Africa. By doing this here as a chemist, I bring together four areas of science: chemistry, biology, physics and geology. I propose here that by physics the transmutations occurring in uranium caused viral evolution in organisms in Africa for the origin of the HIV virus with man's intervention. This is a theory that I am presenting here. It is a theory. My theory could be wrong here, but I have this stroke of creativity that I express here. According to literature genetics points to the SIV developing in chimpanzees in Southeaster Cameroon specifically near the Boumba, Ngoko, and Sangha rivers about 1920 and it traveled downriver to **Kinshasa** where it adapted to humans. I correlate the environment of the chimpanzees with the geology of that region having unusually rich uranium deposits. By my theory the anti-neutrinos from the ground and the uranium beneath were producing higher than usual antineutrino flux for stimulating the Zn in the Chimpanzees for causing the SIV virus over years. I point out during this time in 1920, man intervened and started to mine the earth deposits of radioactive substances and elements, as in 1921 radium was being mined in this area and as the virus came in contact with humans, the antineutrinos from the radium and uranium and other transmutation process accelerated the adaption of the SIV. I, Reginald B. Little (RBL) here point out that about 1920 to humans as it evolved into HIV between 1920 to 1950. The advent of uranium for nuclear reactions during the 1940s accelerated this as the area in this region of Congo near Kinshasa had one of the first identified deposits of highly enriched pitch blend uranium with less need processing for pure pitch blend uranium compared to other regions around the world. This mine is known as the

Shinkolobwe mine in this Belgian Congo region near Kinshasa, Congo. It was known that Bantu Congolese laborers worked the Shinkolobwe uranium mine and the cross over of SIV into human in this area and the handling of these humans of uranium and the proximity to pitch blend uranium regular unknowingly exposed them to higher levels of anti-neutrinos from the uranium. By the theory of RBL, such interactions off the antineutrinos with the SIV helped the SIV mutate to a form that can infect humans for the virus to jump from chimpanzees to humans. I thereby here propose antineutrinos helped SIV mutate to HIV. In support of my theory of the uranium and the high level of human exposure to anti-neutrinos during the intense mining of uranium in Shinkolobwe in Hout-Kantase province of Congo accelerated the adaptation of SIV to humans and its infection of humans to become HIV. Such aspect of my theory is supported as the first every direct detection of HIV in human blood of a Bantu Congolese resident was in 1959 in this region of Kinshasa Congo. But further I am inspired as just as here I propose that anti-neutrinos acted on humans to cause the SIV to mutate to HIV for infecting humans during this time (1940s and 1950s) of anti-neutrino exposure of humans handling enriched pitch blend uranium over prolong time of many years (1940s thru 1950s), from my prior publication such antineutrinos may also as I proposed in theory be used to act on humans to affect the ^{64}Zn in HIV infected cells to alter the HIV to possibly treat and cure HIV. By the theory of RBL if anti-neutrinos acting to mutate SIV to HIV during 1940s thru 1950s to introduce this virus to humans, then by RBL theory it may be possible to use anti-neutrinos to act on HIV to transform it to inactive state for possibly treating HIV and possibly curing this disease.

Conclusion

On the basis of these approaches in particular feeding ^{62}Zn (or possible ^{61}Zn and ^{60}Zn) with minutes to hour transmuting of these Zn isotopes to unstable Cu isotopes and transmuting unstable Cu isotopes to stable Ni isotopes with magnetic valence shells for altered binding in the Zn fingers for inactivating HIV and killing HIV infected cells, the author (RBL) determines a new theoretical cure for HIV. A new theory for the accelerated mutation of SIV to advance in chimpanzees in 1920s and cross over to humans for origin of HIV during 1950s in Congo Africa is proposed by the author (RBL) on basis of rich pitch blend uranium ground and uranium mining in Congo during the 1940s and 1950s for acting on zinc in chimpanzees and humans to induce mutations of SIV to HIV under the radiation exposure of the uranium in this region of Congo, Africa.

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