
The following was presented by Dr. Hildegard Staninger to the
National Registry of Environmental Professionals Conference
in Nashville, TN, on Oct. 18th, 2006

FAR-INFRARED RADIANT HEAT (FIR RH) TYPE REMEDIATION FOR MOLD and OTHER UNIQUE DISEASES

Dr. Hildegard Staninger, RIET-1
Industrial Toxicologist/IH & Doctor of Integrative Medicine

Contact Information updated 8/14/07:

Integrative Health Systems, LLC

415-3/4th N. Larchmont Blvd., Los Angeles, CA 90004

Tel: 323-466-2599 Fax: 323-466-2774

© October 18, 2006

Presented at the

NREP Annual Conference in Nashville, TN, October 18th, 2006

for the National Registry of Environmental Professionals

P.O. Box 2099, Glenview, IL 60025

Phone: 847-724-6631, Fax: 847-724-4223

ABSTRACT

Far-Infrared Radiant Heat (FIR RH) has many known names, such as the bridge of Terra Hertz and many others. It is made up of no photons and only 1/2 electron spin that gives it its unique qualities to aid oneself in the remediation of the contamination within one's own body and in one's indoor environment. We naturally acquire it from the sun with all the other spectrum specific wavelengths of visible and invisible light. It is the grounding rod of the life force of a single cell, just as it is the universal remedial means for purifying many different items that have a common molecule of water in them. A detailed account of its applications in environmental health and engineering will be discussed in its application of mold and other unique diseases that have affected our bodies, homes, workplaces and environment.

What is Far-Infrared?

It is hard to explain something that one cannot see with the naked eye, but every evening, every one of us looks up into the heavens to see the twinkling stars that make up our universe. We called the first stars born in the galaxies the "heavens." That beginning emerged in a specific range of radiant heat as a luminous speck of dust and energy called "Infrared." Infrared is usually divided into 3 spectral regions: near, mid and far-infrared. The boundaries between the near, mid, and far-infrared regions are not agreed upon and can vary, but all create radiant heat. (1)

Any object that has a temperature (i.e. radiates heat) emits infrared energy or IR. Therefore, basically all celestial objects and other living organisms emit some infrared. The wavelength at which an object radiates most intensely depends on its temperature. When a person is ill, they will lose radiant heat within their body. The electromagnetic spectrum is composed of three segments of wavelength: near, mid and far- infrared. They are measured in microns or micrometers (a micron = 1/1,000,000 or 0.000,001). **(1)**

It is interesting to note that this process may be viewed as losing light within one's body as seen in chemical luminescence tests, which are currently being used to aid in the treatment of chronic diseases, such as cancer, diabetes, liver and polycystic kidney disease. In general, as the temperature of an object cools, it shows up more prominently at farther infrared wavelengths. This means that some infrared wavelengths are better suited for studying certain objects than others, such as far-infrared. **(1)**

The far-infrared segment of the electromagnetic spectrum occurs just below, or "infra" to red light as the next lowest energy band. This band of light is not visible to human eyes but can be seen by special cameras that translate infrared into visible colors, such as the way thermal cameras do. **(2, 3)**

We can, however, feel this type of light, which we perceive as heat. The sun produces most of its energy in the infrared segment of the spectrum. Our atmosphere has a "window" in it that allows infrared rays in the 7 to 14 micron ranges to safely reach the earth's surface. When warmed, the earth radiates infrared rays in the 7-14 micron bands, with peak output at 10 microns.

Our tissues normally produce infrared energy for warmth and tissue repair. Tissue production of infrared energy is associated with a variety of healing responses. At times, the infrared energy in our tissues may require a boost to a higher level to ensure the fullest healing possible for tissue repair. Body tissues that need an infrared boost selectively absorb infrared rays. The tissue will only use the infrared rays in the areas where it is needed. After boosting a tissue's infrared energy, the remaining rays pass on harmlessly. This phenomenon is called "resonant absorption." Our bodies radiate infrared energy through the skin at 3 to 50 microns, with most of the output at 9.4 microns. Our palms emit infrared energy in the level of 8 to 14 microns. If you put your hands on top of each other, but do not allow them to touch, and spin them fast like a tumble weed in a western movie, then stop them and bring the palms near each other but do not let them touch, you will feel a radiant heat. This is infrared energy. Palm healing, an ancient tradition in China, has used the healing properties of infrared rays for 3,000 years. Yogis in India also employ palm healing and recommend it, especially for relieving eyestrain.

Astronomers at the Space Telescope Science Institute, the COBE/DIRBE Science Team and NASA have determined that in the far-infrared range, the stars have all vanished. Instead we now see very cold matter (140 Kelvin or less). Huge, cold clouds of gas and dust in our own galaxy, as well as in nearby galaxies, glow in far-infrared light. In some of these clouds, new stars are just beginning to form. Far-infrared observations can detect these first stars called protostars long before they "turn on" visibly by sensing the heat

they radiate as they contract. And maybe this far-infrared light of the cosmos is the simple speck of luminous dust that was used to create all living matter eons of years ago from the pulsation of divine love.(4)

FDA, EPA and Nanotechnology

Nanotechnology is the ability to control things at an atomic and molecular scale of between one and 100 nanometers and has been met with enthusiasm across a variety of industries. Critics highlight the murky area of how nanoparticles affect toxicity and say nanoparticles should be treated as new, potentially harmful materials and tested for safety accordingly.(5)

Unlike pharmaceuticals, which must go through a series of pre-market approvals, finished dietary supplements need no pre-market approval. Under the Dietary Supplement Health and Education Act (DSHEA), which is part of the Food and Cosmetic Act, only ingredients not marketed in the US before October 1994 must be approved by FDA before use in consumer products. Thus, as it stands, pre-market regulation of nanotechnology in dietary supplements, biological pesticides, and other man made nanotechnology does not fall under FDA, EPA, OSHA, FIFRA and other regulatory agencies in the USA, just for the simple reason that the nanotechnology is so small that the conventional regulatory laboratory methods do not have equipment to measure at 9 decimals below the zero and are only addressing 3 and 4 decimals (ppm, ppb, and ppt).

In 2005, the Woodrow Wilson International Center stated that more than \$30 billion in manufactured goods, according to Lux Research, almost doubled the previous year. The market analyst projects that by 2014, 15 % of all globally manufactured goods will incorporate nanotechnology. So, as environmentalists, engineers and scientists, how do we monitor and keep our bodies, workplace and environment safe from its own self? (6)

Transcending Global Economy by Protecting the Land, Air and Sea

"If there is magic in this planet, it is water," wrote Loren Eisely. Covering 70% of the earth's surface and making up two-thirds or more of the weight of living organisms, water is indispensable to life. Not only does it affect humans, animals, and plants, but also the earth's life force.

Throughout history, the quality of drinking water has been a major factor in determining human welfare. (7) Pollutants can range from toxic chemicals, bacteria, mold, virus, parasites, mineral fibers, radon, metals, and even the new nanotechnology products (biological pesticides and viral protein envelop technology). (8, 9) The association of cause and effect for lead is attributed to Hippocrates about 400 B.C. Georgius Agricola in the sixteenth century knew enough about the occupational and environmental occurrences of certain diseases and substances encountered to write books on occupational diseases. Ever since, the list of toxicants has grown longer. (10) And it will be the synthesizing minded environmental professional who will have to address diseases like Morgellons and other unique diseases that went environmentally wrong in the reality of the world

nanotechnology. It's not a quick fix. Many of the collective engineering, scientific, industrial hygiene, and occupational physicians have had to take care of the mycotoxins and biofilms created from simple mold infestation in the workplace and in the home. The city of New Orleans after hurricane Katrina is just one mold spore time bomb, causing its residents arthritis, Crohns disease, diabetes, and other diseases, to name just a few. **(11)**

Water pollution is any physical or chemical change in water that may adversely offset organisms. It is global in scope, but the types of pollution vary according to a country's level of development and economic stature. In the poorer nations, water pollution is predominantly caused by human and animal wastes, pathogens (bacteria, fungi, and virus), parasites from their waste, and sediment from unsound farming and timbering practices. The rich nations also suffer from these problems, but with their more extravagant lifestyles and widespread industry, they create an additional assortment of potentially hazardous pollutants: heat, toxic metals, acids, pesticides, endocrine disruptors in waste water from medications/chemo, and new nano biological sensors for illegal drug monitoring and biological pesticides. **(12, 13)**

The use of the biological pesticide *Bacillus Thuringiensis* for mosquito control alone in Santa Monica, California left a tale of illogic. If you use a biological agent that is now called a biological pesticide that is made up of the DNA of a *Bacillus* bacteria from soil and the other half from the DNA of syphilis then it is only logical that 6 months after spraying you would get an outbreak of syphilis in individuals who had some blood generational relative in the past and have an epidemic of this disease. It is simple homeopathic logic to the synthesizing minded environmentalist.

Our EPA air permits only regulate 6 pollutants, with the watchful eye on others on the horizon. None address the use of electronic, psychotronic and information weaponry; high altitude ultra low frequency weapons; plasma, electromagnetic, sonic and ultrasonic weapons, laser weapons, strategic, theater, tactical or extraterrestrial weapons, chemical biological, environmental climate or tectonic weapons. Chemtrails will be part of the environmental professionals' monitoring programs of the near future to prove it was not industries' pollution nor a work- place exposure that cause the new diseases of nano and beyond technology. **(14)** The way to protect the environment from these new environmental factors is only by maintaining one's own health, environment and food sources to be as sound as the cry of a newborn baby through the universe.

Mold and Other Unique Diseases

Mycotoxin is a highly toxic principle produced by molds or fungi. One type, the aflatoxins, is a member of tricothecene group produced by the *Fusarium* fungus. This has been identified in samples of the so called "yellow rain" in Southeast Asia, where it is said to have been the cause of many deaths among war refugees. Its presence there is subject to some conjecture, since the *Fusarium* fungus cannot germinate in the humid environment of that area unless it is altered through genetic manipulations by man. There is substantial evidence (blood tests, autopsies and contaminated gas masks) that the former U.S.S.R. has used such lethal agents in Afghanistan, just as many other countries

have used these lethal agents since the dawn of history. The human body, once exposed to a mycotoxin, runs a triple risk to its toxic effects. The triple risk factors are direct toxic effects of the mycotoxins, acquisition of mutated RNAi from the mycotoxin's parent fungus and creation of an internal biofilm, which will harbor a toxic soup of disease. **(15)**

Fungi grow all over this planet. They are found in the soil, on trees and in water. Their spores travel throughout the lands by the winds from the four corners of our world. Biosensor testing conducted by the U.S. military has resulted in an increased population of *Aspergillus niger* on homes, trees and other materials in various areas of the United States of America. **(16)**

Over the last decade, starting in the 1990's, research has implicated many toxin-producing fungi, such as *Stachybotrys*, *Penicillium*, *Aspergillus*, and *Fusarium* species, to indoor air quality problems and building-related illnesses. Inhalation of mycotoxins, producing fungi in contaminated buildings, is the most significant exposure, however, dermal contact from handling contaminated materials and the chance of ingesting toxin-containing spores through eating, drinking and smoking is likely to increase exposure in a contaminated environment. Recent advances in technology have given laboratories the ability to test for specific mycotoxins without employing cost-prohibitive gas chromatography or high performance liquid chromatography techniques. Currently, surface, bulk food and feeds, and air samples can be analyzed relatively inexpensively for mycotoxins.

During exponential growth, many fungi release low molecular weight, volatile organic compounds (VOCs) as products of secondary metabolism with a melting point of 81 degrees C or less. These compounds comprise a great diversity of chemical structure, including ketones, aldehydes, and alcohols, as well as moderately to highly modified aromatics and aliphatics. Cultural studies of some common household molds suggest that the composition of VOCs remains quantitatively stable over a range of growth media and conditions. Furthermore, the presence of certain marker compounds common to multiple species, such as 3-methylfuran, may be monitored as a proxy for the presence of a fungal amplifier. **(17)** This method has been suggested as a means of monitoring fungal contamination in grain storage facilities. Limited evidence suggests that exposure to low concentrations of VOCs may induce respiratory irritation independent of exposure to allergenic particulate. Volatile organic compounds may also arise through indirect metabolic effects. A well-known example of this is the fungal degradation of urea formaldehyde foam insulation. Fungal colonization of this material results in the cleavage of urea from the polymer, presumably to serve as a carbon or nitrogen source of primary metabolism. During this process formaldehyde is evolved as a derivative, contributing to a decline in indoor quality. **(18)**

Many fungi, mycotoxins, and their VOC's are at a level of detection within the human body that is very hard to determine at relatively low costs. Tissue samples of blood, urine and even direct organ/tissue biopsy will determine the presence of a fungi, mycotoxin and/or their VOC's To kill fungi and remove other substances, it is necessary to look at a variety of treatment modalities. Current anti-fungal formulations have been developed to

address specific fungal infections. In many cases, it is very hard for the healthcare provider and physician to determine what species of fungi was present that created which specific mycotoxin, which is a billion dollar revenue to the pharmaceutical industry.

Fungal infections in AIDS patients have been observed in tissue biopsy reports to be growing within the tissue, and this causes great health risks to the patient and the environmental engineers who have to monitor HVAC systems within a hospital or hospice setting. The use of far-infrared as a treating modality can address the electromagnetic spectrum in micron and micrometers (nano level), which would be an ideal choice in treating fungal infected and other unique, diseased patients, HVAC surfaces (walls, ceilings, floors) and water. The far-infrared segment of the electromagnetic spectrum occurs just below, or "infra" to, red light as the next lowest energy band, as previously discussed.

Our tissues normally produce infrared energy for warmth and tissue repair. Tissue production of infrared energy is associated with a variety of healing responses. The Far-infrared travels the path of fresh water between the cells thus correcting the water molecules bond angle to a perfect hexagonal shape that then collects a total of 6 water molecules to form a collective microtubule of water. The microtubule then creates a fiber optic response that aligns all the molecules to respond to the correct mechanisms of the blueprint of the DNA. Once far-infrared is within the body at its total capacity, it is repealed. This occurs in all living forms of life and in any material that has moisture or a water molecule within its pores, such as cement which becomes 4-5 times stronger. (19)

Body tissues that need an infrared boost selectively absorb infrared rays after boosting a tissue's infrared energy: The remaining rays pass onward harmlessly. This phenomenon is called "resonant absorption." Our bodies radiate infrared energy from 8 to 14 microns. Palm healing, an ancient tradition in China, has used the healing properties of infrared rays for 3,000 years. Yogis in India also employ palm healing and recommended it especially for relieving eye strain.

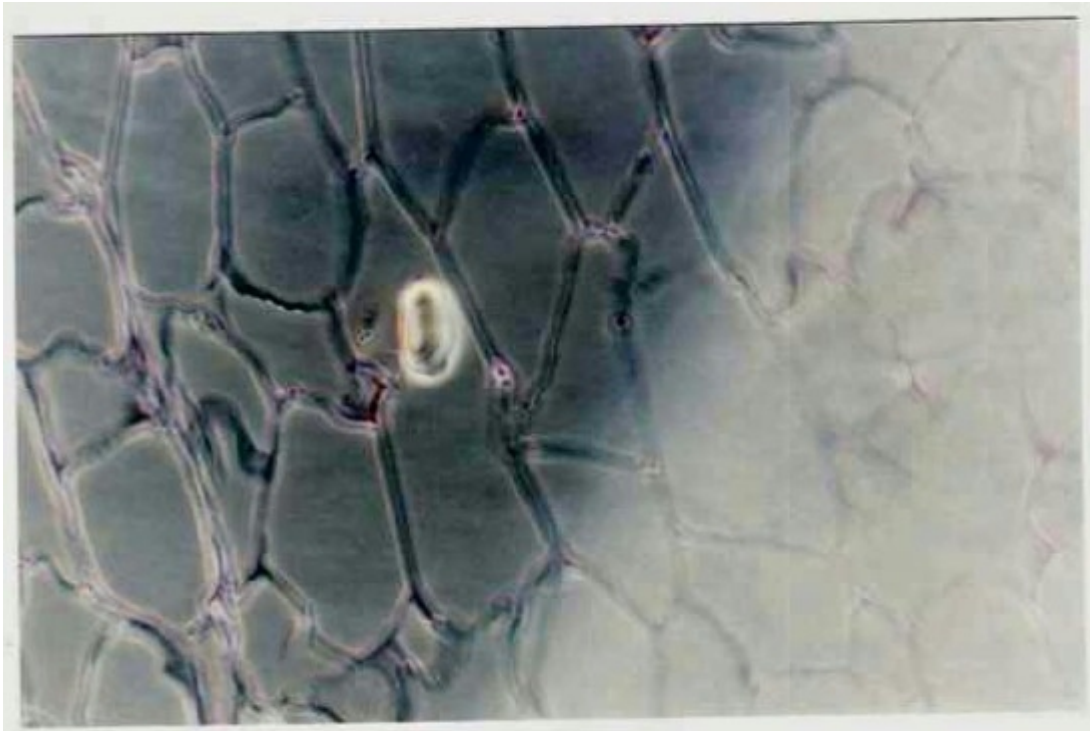
The use of high performance carbon fiber that is made from the filaments of man-made diamonds (zirconium), which is crystalline in structure, has been developed by MPS Global, Inc. in panels for FIR Therapy Rooms, and individual use Capsule DIMA. All panels create a steady stream of pure far-infrared radiant heat that is from 4 to 16 microns. There are no photons and 1/2 electron spin, which is the basic definition of FIR in any CRC Press Handbook of Physics text. The use of these panels will create a temperature of 16521 degrees C, which does not cause any burning of the skin or ill effects upon its surfaces. They are the environmental answer to new nanotechnology-created diseases the next generation of environmentalists will have to correct. The melting point of many mycotoxin VOC's is 81 degrees C and when using FIR radiant heat at 165 degrees C the compounds are evaporated off, or out of the body or surface area, for environmental remedial activity.

Some other diseases that have come into play for workplace and environmental exposures are the following:

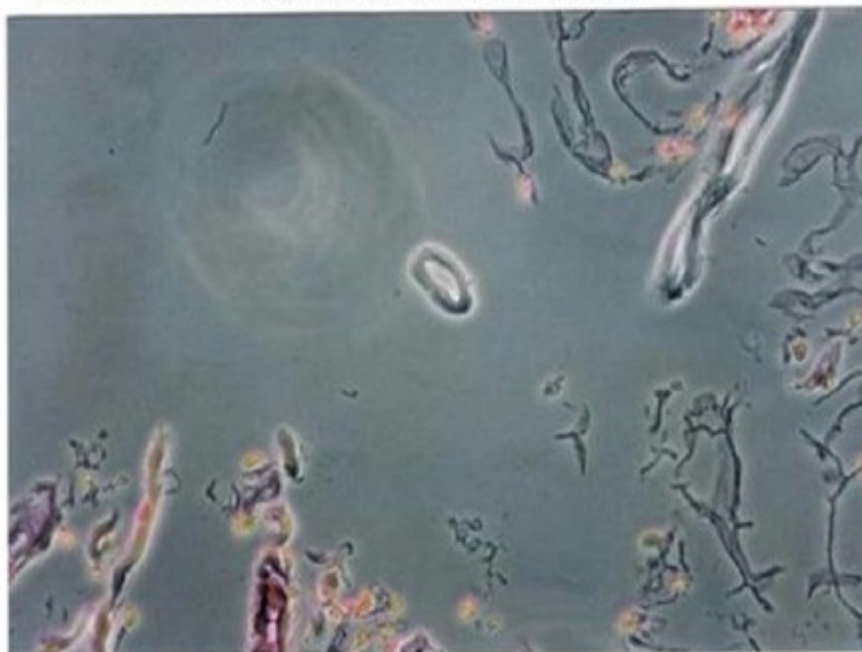
Morgellons - A disease in which individuals have the growth of fibers from their skin that burn at 1,700 degrees F and do not melt. **(20)** A private study to determine the chemical and biological composition of these fibers has shown that the fibers' outer casing is made up of high density polyethylene fiber (HDPE). The fiber material is used commonly in the manufacture of fiber optics. There is no history of the individual in that industry or coming into contact with this material. It was further determined that this material is used throughout the bio nanotechnology world as a compound to encapsulate a viral protein envelope, which is composed of a viron (1/150th times smaller than a virus) with DNA, RNA, RNAi (mutated RNA) or RNAsi linear or ring plasmids for specific functions. **(21, 22)** Toxicological pathology identification of tissue biopsies from an individual diagnosed with Morgellons revealed the presence of continual silica or glass tubules with the presence of silicone. **(23)** It must be noted that the core toxicological effects of silicone alone have been demonstrated throughout the breast implant industry and litigation cases. **(24, 25)** Furthermore, silicone cannot make silica, but silica or silica bicarbonate can make silicone through natural cellular interaction in a biological system. The subject did not have breast implants or any other implant or silicon glue injections.

**ALL PHOTOGRAPHS ARE COPYRIGHTED
AND MAY NOT BE COPIED**

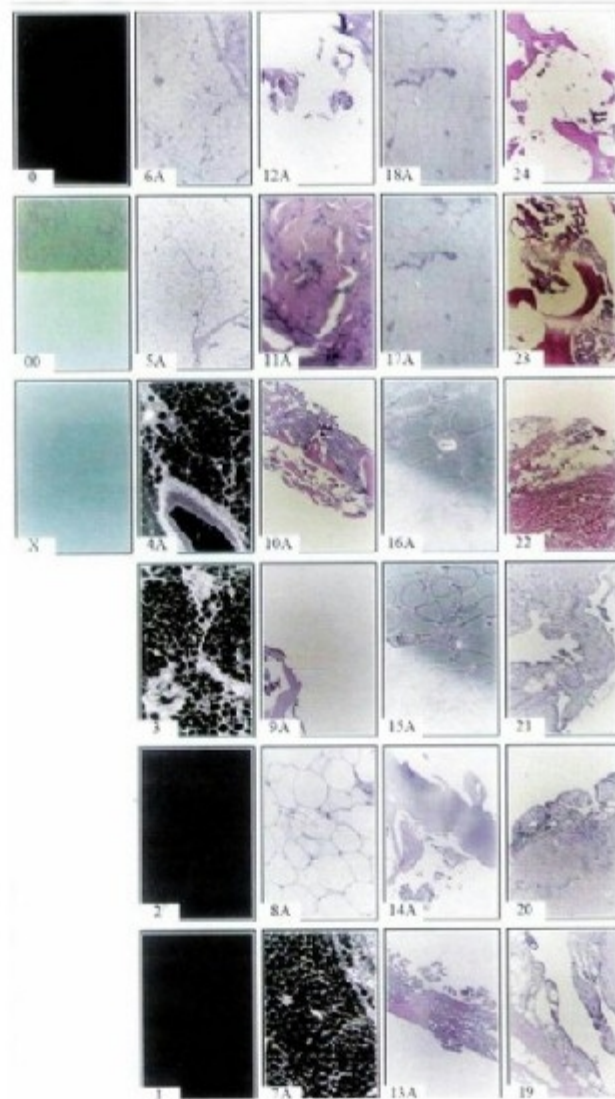
PHOTOGRAPH 2-2: Photograph of Silica Crystalloid Material and Silicone from an individual diagnosed with Osteo Arthritis of the right knee. The same patient had been diagnosed by other physicians for Delusional Parasitosis which has been associated with patients having Morgellon's Disease or Unknown Dermatosi Syndrome. Biopsy sample taken from right knee area of patient Concord Hospital, Concord, New Hampshire. Research Project FMM of Dr. Hildegard Staninger, Industrial Toxicologist, Integrative Health International, LLC, Lakewood, CA. Photograph by Dr. Rahim Karjoo, MD, Pathologist © October 7, 2006



PHOTOGRAPH 1-1: Photograph of Silica Crystalloid Material and Silicone from Silicone Breast Implant Patient from Silicone Breast Implant Testimony in early 1990's for FDA and Private Ligation Cases. Photo by Dr. Rahim Karioo, MD Pathologist, AMDL, Santa Ana, CA.



Morgellons



Index To Above Slides

- Photo #1 (Slide #3): - Fat and soft tissue containing silicone
- Photo #2 (Slide #4A): - Vessels containing particles and silicone in the fibro fatty tissue
- Photo #3 (Slide #7A): - Fibro fatty containing silicone
- Photo #4 (Slide #15A): - Silicone in the fat
- Photo #5 (Slide #16A): - Silicone in the fat
- Photo #6(Slide #19): - Synovium fibrosis and vascularization
- Photo #7 (Slide #20): - Inflammation of synovium
- Photo #8 (Slide #21): - Inflammation of synovium
- Photo #9 (Slide #22): - Soft tissue with bone formation
- Photo #10 (Slide #11A): - Degeneration of scar tissue
- Photo #11 (Slide #23): - Degeneration fragmentation of the bone

Photo #12 (Slide #24): - Degeneration fragmentation of the bone

Photo #13 (Slide #9A): - Degeneration fragmentation of the bone

Photo #14 (Slide #10A): - Massive degeneration fragmentation of the bone

Photo #15 (Slide #13A): - Bone formation of articular surface

Photo #16 (Slide #14A): - Conversion of cartilage of articular surface into the bone

Second Generation Dioxin

The following photo is a boy born without legs:



- - - Children born of the second generation of offspring from the Vietnam War are experiencing severe birth defects as seen in an article of Vanity Fair this year. It shows specific birth defects of keeping the bones in reverse positions, which again, is a result of the improper alignment of the water molecule upon the developmental embryo's cellular signaling system and sensing.

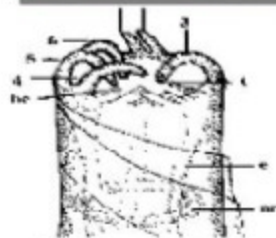
Parasitic Chronic Fatigue Syndrome (CFS)

Parasitic Chronic Fatigue Syndrome

IDENTIFY THE MALE



IDENTIFY THE FEMALE



Mouth Parts, Esophagus, and Nerve Ring

C. pulmonis has been found in the sputum of CFS patients but not in controls in blinded trials. Forty-seven percent of 3-day sputum samples were positive. The estimated infection rate is conservatively estimate at 63 percent (corrected for test sensitivity). Microscopic identification is based mainly on decayed and fragmented specimens which are naturally coughed up in sputum. See "Find Cryptostronylus pulmonis" link above.

From 400,000 to 800,000 Americans meet CDC criteria for CFS. It is a debilitating disease who's cause remains unknown. It is characterized by profound fatigue (lasting months and typically for years), muscle pain and weakness, joint pain, cognitive impairment, and other symptoms. It often starts suddenly with flu-like symptoms. The course of the disease is often variable. Symptoms are usually intermittent. Recovery rates after ten years are generally low. The disease has been reported in many "Western" countries in the mid 1980s, although there may possibly have been earlier occurrences, mainly in the latter part of the 19th century. Most cases are sporadic but clusters have occurred in Northern Nevada, Upstate New York, and New Zealand.

11/20/04 Page

Copyright 1999, L.A. Meyer

- - - 63 % of the patients diagnosed with Chronic Fatigue Syndrome (CFS) had a hidden lung worm, *Cryptostronylus pulmonis* cultured from their sputum. This species of worm is a nematode. Its male measures 250 nanometers, while the female measures between 750-1000 nanometers in length. (26) Currently, biological pesticide manufacturers are using nematode eggs as delivery systems of viral protein envelopes to corn, potatoes, and other agricultural feed materials that are used as feed for poultry, beef and domestic animals (cats and dogs).

Conclusion

The last 30 years of the birth of OSHA and EPA has given us 3 decades of professionals in the field of environmental health and science. All of us have been dedicated to reducing the risk of exposure to hazardous materials in the workplace, environment and home. We came from a generation of creating a Material Safety Data Sheet (MSDS) and telling the world of industry that it must comply but little did we know that mankind was on its own mission of creating nanotechnology that would never be ruled by an MSDS or hazardous material incident report. It would go as a silent plague into the DNA of every living creature on this planet to reveal its true face in the generations to come. Or, will it be one that never shows its face because the world may become infertile due to its own demise?

REFERENCES

1. Staninger, Ph.D., Hildegard. What is Far-Infrared? Healthy Life USA Magazine. Los Angeles, California. Volume 2, March 2004.

2. Zybron Optical Electronics, Inc. Our Unique Sensors and Their Innovative Fusion Systems. Beaver Creek, Ohio. © August 2006.

3. Integrative Thermal Intelligent Products. Tri-Tracker: Detector of DNA, RNA and Viral Protein Envelops. Dayton, Ohio © October 2006.

4. Markarian, Ph.D., Mark. Work in progress on the light bond and its universal applications to love. The Human Enterprise, Palisades, New York © 2001 - present.

**5. Dousaud, Clarisse. FDA not "nano-ready", says report.
<http://www.cosmeticsdesign.com/news/ng.asp?n=71078-fda-woodrow-w...> © October 8, 2006.**

6. Woodrow Wilson International Center, Washington, DC.

7. Sacarello, Ph.D., Hildegard L.A. International Water Quality Challenges: Their Recognition, Evaluation and Remediation. World Safety Organization Conference Proceedings: WOSAPEC 1994. WSO Journal. © September 1994. pgs. 23-26.

8. Chanlett, Emil T. Environmental Protection: Second Edition. MacGraw-Hill Book Company. New York, New York. © 1991. pgs 145-146.

9. U.S. Patent and Trademarks. Entomopathogenic Pesticides, Bayer Corporation. Washington, D.C. © 1986.

10. Science. "Global Water Scare." Volume 262. Nov. 12, 1993. pg. 987.

11. Staninger, Ph.D, Hildegard. Mycotoxins: Their Toxicological Effects on the Human Being. World Safety Organization. 17th International Environmental Safety and Health Conference and Exposition. November 3-5th, 2003. Denver, Colorado. pgs. 21 - 25.

12. DARPA. Development of Biosensor for Detection of Illegal Drugs in a joint initiative between U.S. Army and Mexico Federalizes. © 2005. SITCOM

13. U.S. EPA Biological Pesticides for Mosquitoes. Bacillus Thuringiensis controlled spraying Santa Monica, California. © 2004

14. Worthington, Amy. Aerosol and Electromagnetic Weapons in the Age of Nuclear War.

23. Karjoo, M.D., Rahim and Hildegard Staninger, Ph.D. Toxicological Pathology Evaluation of Tissue Biopsy Specimens of a Morgellon Patient. Pending publication American College of Pathology. © 2006-2007.

24. Kendell, Pamela. Torn Illusions: One Woman's Tragic Experience with the Silicone Conspiracy. New Horizon Press. Far Hills, New Jersey. © 1994

25. Karjoo, M.D., Rahim. U.S. Silicon Breast Implant Studies. American Medical Diagnostic Laboratories, Inc. Santa Ana, CA. © 1994

26. Kalpow, Ph.D., Lawrence A. Suspected New Species of Nematode Parasite in Chronic Fatigue Syndrome (CFS) *Cryptostrongylus pulmoni* (provisional) " The Hidden Lung Worm." <http://member.tripod.com/lak123/>