War on AIDS: too many lies and not enough science

by Warren J. Hamerman

The global war on AIDS has to be fought on three fronts simultaneously: the public health front, the public information front, and the basic scientific research front. All three fronts must be coordinated through a wartime Manhattan Project "crash program" based upon space-age, high-technology biological science, unprecedented in scope, which has the objective of effectively giving the scientific command a "blank check" to do whatever is required to defeat the enemy.

Happily, the decision by President Reagan to initiate mass "routine testing" has finally broken the logjam on one part of the necessary public health battle—the urgent need through mass testing to ascertain how far the AIDS viruses have penetrated our society.

Nonetheless to date, on all three fronts, there have been too many lies and not enough science.

There have been those who propose lies instead of science because it costs less money.

There have been those who propose lies instead of science because they wish to radically overthrow the basic family-centered values of Western civilization in favor of the overt dominance of all forms of the rock-drug-sex counterculture, polymorphous perversity, and even open satanic cult practices.

There have been those ideological malthusians who propose lies instead of science because that will help reduce the "overpopulation crisis" among those they deem "useless eaters." At a recent parade of homosexual activists in Boston, Massachusetts, for example, one of the popular chants was "Two, Four, Six, Eight, We don't overpopulate!"

There have been those, as well, who wish to use the AIDS crisis as a pretext to revive Nazi practices such as euthanasia (so-called mercy killing).

Who is still lying?

The very individuals who have fought heretofore against traditional public health measures to slow down the spread of AIDS, are still in control of the Centers for Disease Control (CDC), the National Institutes of Health (NIH), the World

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Washington, D.C. police donned rubber gloves to arrest "gay rights" protesters on June 1. Hardly anyone buys the lies about "safe sex" and "no casual transmission" any more—except Surgeon Koop and the Atlanta Centers for Disease Control.

Health Organization (WHO), the cabinet department of Health and Human Services (HHS) and the Surgeon General's office. The network of homosexual activists who have infiltrated these and other policy institutions is still thoroughly entrenched and determined to "take out their rage" on traditional public health values of society.

The principal lies maintained by this unholy alliance were disgustingly displayed at the recent III International AIDS Conference in Washington, D.C. and can be summarized as follows:

Lie #1. AIDS is a sexually transmitted disease or an occupational hazard of intravenous drug abuse. The risk factors for AIDS, from New York to Paris to Uganda and Zaire, are promiscuous heterosexual and homosexual activity as well as IV drug abuse.

Lie #2. AIDS is not readily contagious. AIDS cannot be transmitted through casual contact. The risk to health care workers is quite low and all of the health care workers who become infected were guilty of not taking proper precautions.

Lie #3. There are no environmental "co-factors" to the out-of-control spread of AIDS among impoverished populations in tropical "hell-holes" such as Belle Glade, Florida, Africa, and Brazil. All of the seemingly "No-Identifiable-Risk" or NIR cases in Belle Glade, Africa, and elsewhere can be reclassified into one or another of the acceptable risk categories.

Lie #4. There are no socio-economic "co-factors" to the widespread increase of AIDS among blacks and Hispanics in the U.S., and among the poor of the Tropics, except the propensity of poor people to be promiscuous and use drugs.

Lie #5. There is no basis to focus attention on the possibility of AIDS transmission through saliva or other respiratory fluid. (Scientists such as Dr. Robert Gallo and Dr. Friedrich Deinhardt have created the especially egregious piece of misinformation that the AIDS virus exists in "particularly rich concentrations" in semen, as opposed to saliva.)

Lie #6. AIDS and insect-borne disease under no circumstances are "co-infections." Insects cannot be the vectors for the AIDS virus through "mechanical transmission," or flying contaminated needles, as it were. Despite the fact that the AIDS virus has been isolated from various species of insects in Africa, the case is open and shut that there is no correlation between the widespread cases of insect-borne (or arthropod-borne) diseases in the Tropics and the infection of millions with AIDS there.

Lie #7. So-called "safe sex" and "safe drug abuse" campaigns can slow down the spread of the epidemic, and should be taught in the elementary schools.

Why Dr. Koop must go

If the Reagan administration is serious about fighting AIDS, the President must fire Surgeon General Koop who has knowingly spread misinformation about AIDS. When directly confronted in England approximately nine months

ago by Dr. John Seale of the Royal Society of Medicine, as to why his vaunted public pamphlet on AIDS ignored those "cases" which could not be explained by the theory that AIDS was a sexually transmitted disease, Koop acknowledged that there were anomalous cases but that he could not put them in his pamphlet. Dr. Koop explained his rationale in the following direct statement to Dr. Seale: "I was writing a pamphlet for 250 million Americans and if I included these rare exceptional cases, I would only confuse them."

There exist certain well-known "fast-track" modes of transmission. These include: by the re-use of unsterilized hypodermics by drug abusers, or for therapeutic purposes in poor countries; through repeated close contact of sexual intercourse (particularly the contact with rectal mucosa characteristic of male homosexual activities); perinatally from infected mother to infant; and by the injection of blood and blood products.

Nonetheless, there also exist "inexplicable" cases which do not fit into these accepted modes. What are the principal anomalous cases, which have been thoroughly documented in the scientific literature?

Case #1: A mother was infected by her 1-year-old son (*JAMA* 1986; 255:1005).

Case #2: A 6-year-old boy was infected by his 3-year-old brother (*Lancet* 1986; 2:694).

Case #3: A 61-year-old woman was infected when she was kissed mouth-to-mouth by her impotent husband (*Lancet* 1984; 2:1418).

Case #4: A woman providing home nursing care for her sick neighbor was infected (*JAMA* 1986; 255:1005).

Case #5: Nurses were infected by superficial needle-stick injuries (*NEJM* 1986; 315:382).

Cases #6, 7, 8: Three health care workers were infected in the course of their work when their hands or faces were contaminated by blood (*MMWR* May 1987).

Not enough basic science

The problems with the scientific side of the war on AIDS are multifold:

1) The sociological "soft sciences" such as epidemiology, public health, and social work have been allowed to set policy, rather than the more advanced biological, biophysical, and biomedical sciences. The sociological "soft sciences" are ruled by methods of statistical "shell-and-pea games," rather than searching for the basic scientific mechanisms of biological "causality" and co-factors of the transmission, infection, long dormancy virus "hibernation," and disease process.

2) Many of the leading AIDS scientists have allowed themselves to be compromised through misrepresenting the truth about what was known about AIDS as "authoritative backup" to many of the various lies.

3) Many of the leading AIDS team leaders were themselves formerly cancer researchers, a field which became demoralized after the initial program to "wage a war" and "find a cure" for cancer was scaled down. Cancer researchers (oncologists) set lesser goals for themselves of merely "crisis-managing" disease symptoms through chemotherapy in an otherwise doomed patient. Clinical management ought to be a by-product of advanced scientific research and not vice versa.

4) The AIDS research community is too in-grown, coming from a single section of the medically oriented scientific community, rather than involving a crash interdisciplinary mission team from across the spectrum of fundamental biological research, biophysics, space medicine, basic plasma and particle physics, and classically oriented geometry and mathematics. Since the takedown of the NASA space program in the late 1960s, the advanced scientific frontiers of optical biophysics or what can be called "nonlinear biological spectroscopies" have been devalued in research programs in favor of the more reductionist approaches of molecular biology. We find ourselves in the anomalous position today of having achieved a brilliant genetic sequencing of the AIDS virus in an unprecedentedly short period of time, with too many dead ends in the understanding of the basic causal factors in the process.

Mastering mitosis to cure AIDS

One of the most significant areas of research bearing upon the fundamentals of the AIDS question is the exploration of why some cells which are "infected" with the virus express or reproduce the virus when they undergo cell division, while others do not. Furthermore, some cells may undergo a sequence of cell divisions without expressing the virus, and then, mysteriously break the pattern and express the virus.

How do healthy cells divide, as opposed to diseased cells? Is there a relationship between the way cells divide normally in the brain and neurological system, as opposed to the immunological system? Is there, in short, a mapping relationship between the way we think and the way our body fights disease?

The unique biological feature of the slow-acting AIDS virus is that when it infects a cell, the genetic message or "genome" of the virus migrates to the nucleus, where it incorporates itself into the normal genetic message of the cell. Although the virus's genome succeeds in getting incorporated into the host cell's DNA in its nucleus, it may lie sleeping or dormant across many cell divisions of the parent cell before the virus's message takes over, expresses itself, and turns the cell into a virus "factory."

In short, after infection the virus has three "choices": It can replicate; it can partially express; or it can lie dormant. Scientists such as Dr. William Hazeltine of Harvard are increasingly beginning to speak about the virus having an "intricate regulatory loop" which is sensitive to the cellular

environment. Some aspects of the virus cause it to replicate from 5 to 1,000 times more slowly, but spread more easily from cell to cell. Other aspects of the virus effectively turn on a "fast forward."

What is the nature of the "activation signal" to convert a latent into an actual infection? This is the one of the most central questions of AIDS research. There is currently a debate in the scientific community over whether the "activation signal" is an antigenic or a mitogenic stimulus, or both. An antigenic signal would refer to the stimulus from an antigen or protein specific to another disease, which the immune system is responding to. A mitogenic stimulus results from a specific growth factor associated with cell division.

In either case of the signal's origin, its "tuning mechanism" may be similar. Since the AIDS virus effectively "infects" the chromosome DNA in the host cell, but only replicates itself at some future cell division after it is activated, it is theoretically possible to seek a means to send the cell nucleus a "deactivation" signal instead of an "activation" signal.

Perhaps the most important biological "clue" to the unique nature of AIDS, is that when the virus is "activated," it causes the cells it infects to "fuse" or "clump" together with hundreds and thousands of other cells. The mitotic process in AIDS-infected cells "looks" exactly like the processes of reproduction which occur among the most primitive organisms in the evolutionary scale, such as slime molds. The primitive slime mold grows in clumps, in which one large mass can have hundreds and thousands of nuclei, effectively in the midst of a single cellular blob. The process whereby many cells clump together is often called "cell fusion."

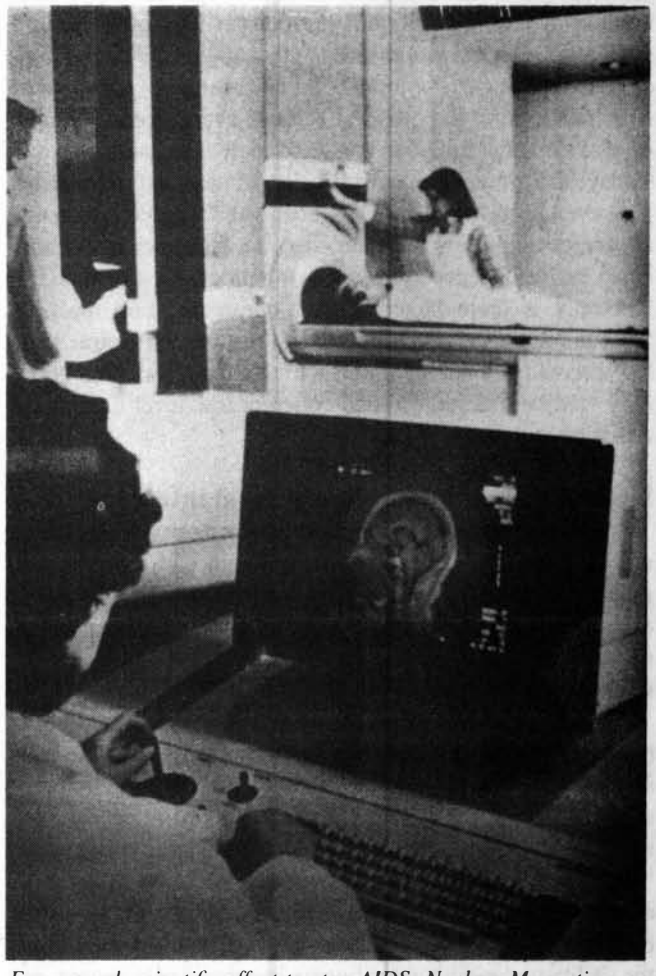
Cell fusion can be artificially induced and controlled in the modern laboratory, through two means:

1) The less efficient means is through various enzymes and chemicals, using the 1970s and 1980s technologies of molecular biology;

2) The more efficient means is through "tuned" or "shaped" electromagnetic pulses, using the technologies of the 1990s in optical biophysics and bioelectromagnetics.

Cell fusion, however, is not just a phenomenon of primitive slime molds or laboratory experiments. It is the clinical essence of what the AIDS virus does to the human body when infection takes over! The AIDS virus only infects one T-cell in every 10 thousand cells. One infected cell, however, can fuse with 100-500 uninfected T4 + T-cells. Thus, certain laboratory experiments show that one virus can kill up to 1-5% of the uninfected T4 + T-cells!

Medical doctors refer to the AIDS-caused cell mass or clump as a "syncytia" or "multi-nucleated giant cell" because of all of the nuclei contained in the large mass. It is the infected monocyte macrophages, which transport the AIDS virus to the brain and other organs. Once present in the brain, they produce the giant multi-nucleated cells which are the one well-documented tissue pathology finding in AIDS patients.



For a crash scientific effort to stop AIDS: Nuclear Magnetic Resonance technology, at the forefront of biophysics.

Thus, if a scientist can cause the host cell line to "eject" the virus message during the course of mitosis, he can "cure" AIDS and not just fight a losing war by "crisis managing" the clinical systems of a dying patient using chemotherapy.

The goal is to cause the host cell *not* to reproduce the portions of the nuclear DNA that contain the virus's message, but only the healthy portions of the DNA. We have to get a lot of scientific research off the ground to make this more than a dream.

Almost certainly, a strategy of intervention into the mitotic process will not succeed if it is based on the "hit-and-miss" methods of mainline medical and pharmaceutical technologies of molecular biology or biochemistry, which randomly try to find a unique gene, chemical, or molecule and then deduce its function through a series of trial and error experiments.

There is an alternative, more advanced method of "opti-

cal biophysics" or "nonlinear biological spectroscopy," the method of biological inquiry introduced by Louis Pasteur (1822-95). Optical biophysics is the study of the interaction of living substances with light—understood as electromagnetic radiation in the broadest sense—over the entire range of wavelengths from gamma- and x-rays to radio waves. Today, these areas not only already provide and promise to give even more wonderful diagnostic and therapeutic methodologies to biology and medicine, but they also unlock the basic intrinsic means by which living processes are "tuned." Not only is there "intercellular" communication through "bioluminescence" or photon emissions, but the "intracellular" events from healthy mitosis to abnormal virus infection may well be ordered through coherent low-level biophoton radiation.

Neurological and immunological interface

The HIV infection initiates a slow progressive degeneration of both the central nervous system and the immune system. In the brain and central nervous system, the virus can be readily found in those neurological cells which undergo mitosis, while it appears to be absent in those cells which do not undergo mitosis.

The virus can be cultured from the cerebral spinal fluid (CSF) of asymptomatic people. Furthermore, individuals can show severe neurological deficiencies without any immune suppression. At early stages in the course of infection, the virus is "transported" to the brain by certain large cells called "monocytes" where they cause cognitive and motor brain dysfunctions that are not immediately noticeable as gross behavioral problems. For instance, the person infected loses the ability to rapidly tap his fingers in a timed experiment, or he or she may lose the ability to connect in sequence a group of circles marked with the numbers 1 through 10 in them. Later in the course of the disease cycle, full-blown AIDS dementia results.

It is significant to note that there are common surface "receptors" to the immunological and neurological cells. There are neurotransmitter receptors on the surface of immune system cells such as macrophages and T-lymphocytes. Similarly, the famous immune system T-4 surface receptor has been isolated from cells in the brain. Also receptors for the thymus hormone, thymosin, have been demonstated in the brain. The thymus is the source of T-lymphocytes, whose function is in part regulated by thymosin.

Thus, there is fairly direct evidence that the basis exists for the immune system and neurological system to "communicate" with each other. The differences in communication between the healthy phase-state, the infected "dormant" phase-state and the full-scale disease phase state must be scientifically explored.

Using advanced technologies such as Nuclear Magnetic Resonance (NMR) imaging scientists have already been able to do dramatic comparisons of the images between healthy and AIDS-infected brains. Multicolor NMR images demonstrate that lesions develop in a majority of the brains of AIDS patients due to a change in the water content of the brain. Furthermore, there is a generalized "atrophy" or dramatic shrinkage visible in the NMR images of AIDS patients.

One team in Sweden under Dr. Lennart Wetterberg at the Karolinska Institutet took NMR scans of up to 40 healthy patients to get a composite "healthy brain" image which could be stored in the computer. On command the computer can "paint" all healthy tissue green and all CSF fluid blue in the healthy brain. When an NMR scan of an AIDS-infected patient is then taken, the scientist instructs the computer to find all abnormalities and paint them red. Using such techniques the basic pattern of an AIDS-infected brain emerges: dramatic lesions in the midst of an even more dramatic overall tendency to atrophy or "shrink."

Another team at the University of California at San Diego is engaged in an intensive research protocol to map the patterns of Nuclear Magnetic Resonance brain scanning in AIDS and ARC patients. They have resolved pictures which pick up dramatic shrinkage in the brains of AIDS patients.

A true crash program

To win the War on AIDS, as 1988 Democratic presidential candidate Lyndon H. LaRouche has repeatedly emphasized, science must be unleashed on a broad front in a true "crash program" method on the scale of the Manhattan Project in World War II or the Apollo space program in the 1960s.

One of the most exciting aspects of frontier optical biophysics research is that there is no clear division between split-second precise diagnostics and screening on the one hand, and potential therapeutic interventions. The scientist compares the unique signatures of a healthy and a diseased cell. At the moment he or she achieves a unique "signal" or spectrum, he also has the potential to "retune" the source of the signal. Since the AIDS virus incorporates itself into the chromosomes of infected cells, the means for future outbreak of the full-blown disease state, is reproduced in the very process of mitosis and replication of the infected tissues.

Currently, the AIDS virus is ahead of science. When the virus infects a cell, a latency or low-level chronic infection results. Under certain conditions the cellular activities issue an activation "signal" to convert the latent infection into an actual infection.

The formidable challenge to science is to reverse the signal and "deactivate" the AIDS time bomb, perhaps during the course of mitosis, in living cells.

Therefore, the types of experimental approaches which have given science the most advanced nonlinear spectroscopy of the mitotic process itself, ought to be a major included feature in frontier AIDS research.

To win the war on AIDS, in sum, we need a quantum leap in the amount of basic scientific discovery—honestly, openly, and truthfully reported.