

person infected with the virus will die as a consequence of that infection, with estimated time of death ranging from between three to more than ten years after the initial infection. The spread of Phase 5 conditions within a large part of any continent, ensures that the entire population of that continent will be dead within about a quarter-century or less.

AIDS is a "Satan bug," the only known disease with the immediate potential for exterminating the human species. For that reason, this pandemic is rightly classed as more dangerous than a nuclear war between the superpowers.

We require a biological agent or combination of agents, the which can detect and track some characteristic element of the AIDS virus's genetic material, and neutralize it wherever it is in the human body. Nothing less than this, represents a cure.

3. THE PROBABILITY OF HUMAN EXTINCTION

Under present medical procedures, there is no cure for AIDS. Four actions must be introduced to slow, and ultimately halt the spread of the infection:

- **Public Health Measures:** Mass-testing of populations for the presence of the AIDS virus itself, supplemented by actions designed to prevent the infected carriers from transmitting the infection to others. This must be combined with as drastic a set of public health measures as may be required, to neutralize the environmental factors by which AIDS may be "casually" transmitted, including drastic measures of pest-control against bloodsucking insects.

- **Discovering a Cure:** We require a biological agent or combination of such agents, the which can detect and track some characteristic element of the AIDS virus's genetic material, and neutralize that virus in whatever part of the human body it may have reached. Nothing less than this, represents a "cure."

- **Medical Procedures Short of Cure:** Pending development of a cure, we require a repertoire of biological agents which contribute to arresting the activity of the AIDS virus: to buy time until a cure is developed and delivered.

- **A Program of Combined Measures:** These programs of public health, research, and health care, must be conducted as an integrated effort, applying to the war against this infection the same approach appropriate for general warfare. The nations of this planet must treat the AIDS infection as like an

invading enemy launched against this planet from outer space, and must mobilize measures of warfare against the virus in that spirit, and by means appropriate to that spirit of enterprise.

4. BASIS FOR COOPERATION AGAINST AIDS

On the surface, the struggle for a cure seems to lie within the scope of what is called "genetic engineering," touching upon areas heretofore associated with fundamental research into cancers. However, in both the Soviet Union and various Western nations, biological techniques more advanced than "genetic engineering" have come into existence. These latter are associated with such terms as "non-linear spectroscopy" of living processes, or, more broadly, "optical biophysics."

In the U.S.A. and Japan, we have and are developing what may be seen, relatively speaking, as "supercomputer" technologies of a type essential for mass spectroscopy of tissue samples and experimental processes. The use of NMR (nuclear magnetic resonance) spectroscopy, as well as ordinary electromagnetic spectroscopy, is indicated. Whereas, published Soviet research indicates that the Soviet Union, which lacks such computer capabilities, has done important advanced work in the field of optical biophysics.

It also appears to be the case, that Soviet scientists have concentrated to an important degree on perfecting analytical methods which may be in some cases useful alternatives to large-scale computer applications.

Although neither superpower is disposed to make its unique advantages freely available to the other, the common danger from AIDS is so great, that some efficient cooperation between the two, in joint use of such capabilities, should be foreseeable. This means, for example, that relevant U.S. computer facilities would be made available for joint U.S.A.-Soviet teams, and that the Soviets would make available relevant, "declassified" aspects of their research in optical biophysics. It means, for example, that other nations' teams would participate in such arrangements, under the provision of a nested aggregation of relevant bilateral and multilateral agreements on combatting AIDS.

5. ORGANIZING THE WAR AGAINST AIDS

The war against AIDS should be organized in the form of a classical military general staff organization of military forces.

- 1) In the U.S.A., a special emergency commission should be established, under both Federal Emergency Management Agency provisions and other constitutional and legal powers of the U.S. presidency. This would be organized in the form of a military general staff for the war against AIDS.

- 2) This general staff would have an intelligence arm integrating two qualities of public health and medical intelligence capabilities: (a) public health intel-

ligence and related operations; (b) medical research intelligence.

3) This general staff would function as a national coordinating agency for the war against AIDS, operating under the relevant national emergency powers defined for combat against this disease.

4) The public health functions coordinated by this commission, would be in the form of law and custom prior to the administration of President Jimmy Carter. This custom and law would be applied according to the requirements in fact represented by the nature and spread of the infection and of both biological-agent and environmental co-factors of both spread of infection and the nature of presented disease-symptoms in which the AIDS infection is either the sole agent or a co-factor.

5) The most distinctive feature of the operations coordinated by the commission, is the verticalization of the medical system, from fundamental research and production of pharmaceuticals, down to the delivery of health-care service or assistance at the regional, state, and local level.

6) As adjunct to domestic functions of this commission, the commission would also be assigned integrated functions of health assistance to other nations.

Cooperation with the Soviet government's relevant agencies would fall within the province of the sixth of the above-listed functions.

6. OVERLAP WITH OTHER TREATY AGREEMENTS

This need for international cooperation in war against the AIDS infection coincides with the ripeness of the time for new forms of long-range agreements among nations on the exploration and colonization of space. For reasons which need not be elaborated here, the present threat from AIDS falls categorically under the longer-range title of "space medicine."

Given the appropriate form of "Apollo-style crash program," and immediate and appropriately energetic forms of public health measures, we should have defeated AIDS within a decade, at most. In the international cooperation organized for the war against AIDS, new kinds of capabilities will have grown up; these capabilities should be maintained in functioning order, as a ready capability for use in combating kindred problems of the future, and for promoting fundamental biological research.

Existing supranational agencies, such as the World Health Organization, are contraindicated as candidates for assuming such responsibilities. 1) The "feudalist" mind-set, the tendency to view such institutions as agencies of a "world government" coming into being, is endemic to the functioning of supranational agencies, a mind-set alien in principle to the sovereignty of nation-states. What is wanted,

instead, is agencies which are task-oriented partnerships of jealously-sovereign sovereign states. 2) What is wanted for combating AIDS, is a mission-oriented organization of international cooperation, rather than attempting to impose a mission upon a supranational agency which has special bureaucratic interests on its own account.

Cooperation among sovereign states succeeds best when it has the form of a military alliance against a common adversary. This is most emphatically the case for cooperation among nations which are otherwise actively or implicitly adversaries. In such latter instances, only an alliance to combat a common adversary more hated by each than each may hate the other, will produce an efficiently fruitful form of cooperation. In the instance of bilateral and multilateral relations among the U.S.A., the Soviet Union, and the People's Republic of China, for example, this is the only logic likely to predetermine efficient cooperation.

We and the Soviet Union are adversaries, deadly adversaries. This point is clearly understood by the Soviet leadership, even when it is not recognized by the lily-livered mush-heads among our institutions. The Soviet government will always act in accordance with that appreciation, and will never act in violation of that policy-perception at any time within the practically foreseeable future. Only if cooperation is of a form premised upon recognition of that fact, can necessary forms of efficient cooperation be defined and implemented. All the mush-headed ideology of "arms control" mythologies aside, the Soviets will never actually cooperate with the United States in any way not contributing to Soviet strategic advantage over the U.S.A., except as the Soviet government recognizes a deadly common adversary it fears and hates more than it does us. Agreements in the latter matters are fraught with difficulties, but are manageable and potentially fruitful; no other sorts of agreements are.

There are only three areas in which real cooperation is possible between the two superpowers.

● **Strategic Defense Initiative:** If the United States demonstrates an efficient will for rapid development and deployment of the Strategic Defense Initiative, the Soviet government is obliged to consider cooperation very seriously.

Since Sokolovskii, it has been continuing Soviet military doctrine, that the development of a strategic ballistic missile defense based on "new physical principles" is a precondition for successful first-strike victory over the forces of the United States. The Soviets will therefore do everything possible to prevent the United States from developing an SDI. However, if it becomes clear to Moscow that the U.S. commitment to SDI is irreversible and efficient, the common adversary of "nuclear war by miscalculation" forces Moscow to cooperate in the parallel deployment of SDI by the respective military alliances. This is the only area of "arms control" in which Moscow would actually cooperate. Other kinds of

“arms control” agreements, to the extent they either exist or are proposed, are frauds.

● **AIDS:** It is now becoming clear to the Soviet government, that AIDS is a “Satan bug,” which ultimately threatens them as much as it does us. This is a common adversary *par excellence*.

● **Space:** The greatest and longest-lasting adversary of both superpowers, and of all humanity, is the conquest of space. This is not the ordinary sort of Earth-bound adversary, such as armed nations or diseases. It is the common challenge

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of all mankind, in which the adversary is “failure.”

It should be the Soviet policy of the United States, respecting prospective forms of cooperation, to bring these three elements of possible agreement into convergence. This does not mean that cooperation in any one is necessarily contingent entirely upon cooperation in both or one of the other two areas. It means, that our policy should be committed to fostering such convergence. It should be our policy, that no efficiently equitable forms of cooperation between the two superpowers is possible, excepting in matters subsumed by one or more of these three classes of cooperation.

The SDI, the war against AIDS, and space-exploration are each and all subsumed by the same array of frontier technologies. Of these three, any form of military cooperation between the two superpowers is sharply delimited by Soviet law. Therefore, even SDI cooperation, however useful and even indispensable as a war-avoidance measure, is more in the area of sharply delimited cooperation among deadly adversaries, than the premise for a general form of cooperation between the two sovereign states. In the battle against AIDS, the matter is quite different, and the possibility of cooperation on space-exploration matters encounters degrees of difficulty which lie between the cases for SDI and AIDS.

The proper approach, is to view cooperation in the war against AIDS, as the pathway to enhanced cooperation in the peaceful exploration of space. Since the physics and biophysics of space-exploration subsumes the entire area of

the war against AIDS, the technical aspect of cooperation in each of the two mission-assignments, is congruent.

The AIDS mission-assignment

The United States should seek a nested set of bilateral and multilateral agreements among sovereign nation-states, bypassing all supranational agencies, for earliest possible total victory in a war against the AIDS infection. The Soviet Union and the People’s Republic of China should be included among the nations with which such treaty agreements are sought.

The United States should establish a joint mission-assignment, “Apollo-style crash program” effort, in cooperation with as many among the OECD nations as will utilize existing or newly adopted treaty agreements to such effect. The United States should also seek bilateral cooperation with the Soviet Union and the People’s Republic of China, agreements to the effect of an alliance to conduct total war against a specific common adversary, with no complicating considerations extraneous to this narrow mission-assignment cluttering the agreements.

The research aspects of the U.S. program, should be in the order of \$3 billion a year or more of federal expenditure. All relevant areas of fundamental medical research, including all areas of “genetic engineering” and “optical biophysics,” should be deployed both in parallel and in cooperation with one another. A “race to a breakthrough” should be the theme of the research program. The primary forms of cooperation sought with the Soviet Union and People’s Republic of China, should be sharing of research-efforts’ information bearing upon reaching the breakthrough desired.

The most important area of such cooperation, is the area of optical biophysics. For the guidance of laymen, the following clarification is supplied.

Since the initial discovery of the fundamental principles of living processes, by the Italian collaborators Luca Pacioli and Leonardo da Vinci, and the successful work of Louis Pasteur on the optical activity of living processes, science has known that the only characteristic distinction between mere organic chemistry and living processes, is the harmonic ordering of living processes’ morphologies, in a manner congruent with the Golden Section of elementary constructive geometry.

Modern biophysics has enriched our knowledge of this matter greatly. The characteristic feature of molecules such as chlorophyll and DNA, is that these molecules function, on the one side, as electrochemical wave-guides which receive energy from their environment, and which transform that collected energy into coherent electromagnetic radiation at higher effective energy-flux densities. The enhanced external radiation of plant and animal tissues when they are damaged, or when cells are undergoing mitosis, is an aspect of this.

We are not addressing living processes as living processes, except as: 1) The non-linear phase-shifts in such electro-

magnetic functions are placed at the center of the definition of living processes; and 2) As cell mitosis, viewed from this vantage-point, is adopted as the characteristic event defining every functional aspect of existence of the cell. This extrapolation from the work of Pacioli, Leonardo, and Pasteur, among others, is the true science of biology mankind has been seeking these past centuries.

As much as is known of these matters in the published literature and by other information from pioneering experimenters, shows that the proper mathematical-physics approach to these spectroscopic features of living processes, is Riemannian electrohydrodynamics. This coincides with a point implicitly emphasized by the Pasteur Institute-trained Soviet academician Vernadsky, better known as the "father of geobiochemistry" and also as the organizer, since the 1920s, of the Soviet "atom project."

The human AIDS retrovirus is the first human-specific virus of this type known. Among the locations invaded by this infection, is the genetic material of the human cells, to the apparent effect that the infected person himself or herself generates this virus under definite, but too-little-understood circumstances. We know the effect in significant degree, but do not yet understand the biological mechanisms by which the relevant events occur.

In AIDS research, and for purposes of effective mass-screening, the most efficient, and only infallible means we possess at present, is a technique of optical biophysics, mass-spectroscopy of samples from possibly infected persons, or tissue-culture samples. We have proof of principle of the feasibility of such techniques, using inadequately developed means. We require a "crash program" to perfect these means, and rapid deployment of the instruments required for this.

The techniques involve three basic methods: 1) the ordinary spectroscopy of samples; 2) the addition of the magnetic resonance spectroscopy to ordinary spectroscopy; 3) powerful, dedicated-application computer modules, for on-line processing of the data being collected by the instruments.

It is our best information, presently, that Soviet research is ahead of us in two relevant areas of optical biophysics: 1) crucial, proof-of-principle experiments; 2) development of analytical methods as efficient substitutes for digital computer applications.

On the second, we have general knowledge of the feasibility of such analytical methods, but to the best of our knowledge, Western countries have given inadequate attention to these, partly because of the availability of large-scale computer systems. These methods are based on the elaboration of a Gaussian approach to harmonic orderings of conic and hyperconic elliptic-series in a Riemannian hyperspherical complex domain. The interpretation of a seemingly arbitrary function in terms of angular rotations of such hyperspherical functions, from this vantage point, is the most advanced method extant in mathematical analysis, and an obvious way of explicit solutions alternative to laborious implicit solutions

estimated by digital-computer applications.

In other words, rather than reading tables of Bessel functions in the ordinary way, recognize that the series of elliptic functions characteristic of a process correspond to a harmonically ordered series of available (least action) states, excluding any arbitrary values in between. Kepler's determination of the planetary orbits, is the classic example of this notion; it was this work of Kepler which led Karl Gauss to discover the principle of harmonically ordered elliptic functions associated with the generation of the arithmetic-geometric mean; from this starting-point, Gauss-Riemann elliptic functions, as distinct from other approaches, are derived. Quantum functions in microphysics, are of the same character. This view of the significance of elliptic functions, as expressing the characteristics of even a non-linear process, is the most powerful tool in analysis, the method informing the analytical work of the LaRouche-Riemann method of economic analysis.

In optical (non-linear) spectroscopy of living processes, precisely this sort of analytical problem predominates. We shall not access the most fundamental features of living processes without assistance of this analytical method. In the case of AIDS, every indication is, that we are up against this aspect of living processes.

Relative to the Soviets, the United States and its allies, including Japan, are far more advanced in development of the kinds of instrumentation which require powerful computers as on-line features of the instrumentation of experimental processes. Presently, Japan is the only qualified source of much of the kind of instrumentation required for this work.

The general research program for the war against AIDS, must combine these three aspects of optical biophysics, both as a form of research independent from other lines of relevant research, and as a supporting feature of "more conventional" "generic engineering" and other approaches.

Roughly, the federal government should spend about \$1.5 billion a year for "conventional" lines of research, and approximately an additional \$1.5 billion for SDI-style approaches to optical-biophysics-oriented experiments and use of advanced optical-biophysics instrumentation as a supporting feature of "conventional" lines of research.

It is in this area that U.S.A.-Soviet task-oriented cooperation should be concentrated.

Short of money for this purpose? Take the money out of the drug-trafficking, by shutting down and confiscating the drug-traffic and drug-money-laundering at all levels: tens of billions will be freed for the war against AIDS, for defense, and for other valuable enterprises. There is abundant wealth, if we shut down drug-usage and drug-trafficking cold.

Otherwise, we must approach the effort to defeat AIDS with the spirit of winning total war against the most Satanic adversary the human race has ever confronted. If we think in that way, the needed means will be mobilized, and victory will be secured.