

Now, perhaps you all remember that in the early 1980s a mysterious new disease, which is now called AIDS, began to claim increasing numbers of lives in America, a few also in Europe. But AIDS from the very beginning picked from very selective groups. It didn't pick your ordinary guy from next door. 90% of its victims in Europe and American, to this day are males. And even they are not just all males, but males between 20 and 50 years of age. And even that is not specific enough for AIDS. A third of these males are intravenous drug users and use those drugs for years at a time, and another two-thirds approximately are male homosexuals. A few other have been identified as AIDS risk groups. These are hemophiliacs, transfusion recipients, and almost all women with AIDS are also intravenous drug users. That's 90% of the AIDS in America; it's almost exactly the same in Europe.

Well, when this new epidemic appeared, scientists were stunned and divided from the very beginning at to whether this was due to a new microbe, a new infectious agent that we had not seen before or discovered before, or could it be due to what was euphemistically called the life style. The style was a euphemism for sexual and drug liberation, which started in the 60s, essentially after the Viet Nam War. And those were the groups, those practicing those new life styles, where most AIDS patients had come from.

Now the confusion ended suddenly in April, 1984, by an unprecedented event, at least unprecedented in the history of science. At that point, it was announced at an international press conference in Washington by the Secretary of Health and Human Services, Margaret Heckler, and Robert Gallo, researcher at the National Institute of Health, a colleague of mine and retrovirologist also chasing viruses for 25 years, that the cause of AIDS had been found, that it was a retrovirus, which is now called HIV, short for human immunodeficiency virus. There was no more need to worry about it; within two years we would have a vaccine, AIDS would be under control, but the hypothesis predicted, unfortunately though, that AIDS would within those two years explode into the general population. In fact, Margaret Heckler was not politically correct enough at the time, she said in the heterosexual population, and therefore she became ambassador to Ireland shortly after.

So it was to explode, then, into the general population. The Gallo hypothesis that HIV infects you, is sexually transmitted, that would explain why it is found mostly in 20 to 45-year-olds, not in the older people, and it would infect the critical part of the immune system called the T-cells. There are two major cellular elements to the immune system: one is called the B-cells and the other is the T-cells. And they are sort of like the Army and the Navy. If you lose one, the defenses become crippled or useless. So if the T-cells are gone, the immune system is gone, and if the immune system is gone, it's like leaving your door open on Telegraph Avenue in Berkeley. All sorts of things start moving in.

So that was the explanation but there were immediately some odd stipulations to this hypothesis. In fact, it's not going to happen right away. You have a couple of years to think about it, five years initially, now we are at ten years. So you get infected today and ten years you're free. You can continue whatever you've done until then, but ten years from now, you may get one of 25 diseases which are all called AIDS now- when they occur in the presence of HIV. That is the definition in terms of Gallo's and Heckler's announcement of April, 1984. These could be dementia, it could be diarrhea, it could be tuberculosis.

Look at the first slide. That sort of illustrates it. This is essentially the definition of AIDS nowadays, and I'm not making that up. That's the Center for Disease Control's definition. When you have tuberculosis, which is one of the 25 AIDS diseases, when you have also antibodies against HIV, your disease will be called AIDS. If you have the same tuberculosis and no HIV, then it is called tuberculosis and nobody gives a damn. It's not going to be published in Nature, in Science, the New England Journal, or the Los Angeles Times, nobody's going to mention it, because tuberculosis is an old disease and nobody can make a career that way.

Dementia plus HIV is called AIDS. Dementia in the absence of HIV, you're just stupid. That is the definition of AIDS. I'm not making that up.

So Gallo and Heckler promised a vaccine, which was a politically good announcement to make because Ronald Reagan was going to be reelected in 1984 and the gay lobby had complained that he had never said anything about AIDS. He said, "What do you want, here's Robert Gallo, he's found the cause and in two years we'll have a vaccine." So Ronald Reagan was reelected.

Now, the major achievements of the virus hypothesis were all in the public relations form. It achieved instant popularity, global popularity, with the scientific community. Among them, particularly my buddies, including me initially for a short term, we all looked for an important virus. Because a lot of scientists in biology are still microbe hunters. There were raised in the era of microbe hunting, the only triumph in medicine- we have eliminated infectious diseases. Starting with Robert Koch and Louis Pasteur, all medical students have been microbe hunters, in their fantasies, at least. They were going to get a bad microbe, make a vaccine, find an antibiotic, cure it, get rich and famous, get a Nobel prize and everything else they wanted. That's the dream of all of us. And that has actually worked, but that has worked so well that infectious diseases are eliminated in the Western world.

Less than 1% of us in our lifetime die from an infectious disease or get sick from an infectious disease. Over 99% of our health problems have nothing to do with infectious diseases anymore. It's clearly a triumph, but it's history. But it's still in the minds of all of us researchers and the last frontier we had in the Western world was the polio epidemic in the 50s, when thousands of virologists were raised to fix the next viral epidemic, but it never came.

So we turned our attention, that's we virologists, to cancer. We hoped that viruses would cause cancer. We learned a lot about cancer, we learned a lot about viruses, but we failed in our mission, basically. The virus/cancer program was a failure. Human cancer is not contagious, is not caused by a virus, and hardly any animal cancers, either. They are a few. My claim to fame is one of those, finding cancer genes, as Scott pointed out in the introduction, but that's a rare thing, it's academically interesting, it is not useful for science in general, and it is irrelevant in terms of cancer statistics.

So here was an army of literally 10,000s of retrovirologists, all of the AIDS orthodoxy is included now, Robert Gallo, Peter Duesberg, Robin Weiss, Howard Temin, David Baltimore, you have heard some of those names, Anthony Fauci, in the newspapers. All of these are retrovirologists from the virus/cancer program that had failed. They were looking for clinical relevance. That is exactly what they were looking for. Finally, there was some clinical relevance, an important disease, to make a name for themselves, and of course to justify their research, which is nothing that a scientist would see better than the end of his or her career or the middle or it, or even at the beginning, to make clinical relevance and become famous.

So the retrovirologists all immediately agreed, sure, it's got to be a viral disease. And the approval was even more widespread, because the new thing happened to biology in the last 20 years, and that's the commercialization of science, which is hardly ever addressed because most scientists see themselves as truth-seekers working at universities in ivory towers and are publishing papers in journals that look for nothing but the truth. But the reality is that if you look at Berkeley, at UCLA, and all the major campuses, they are surrounded by bio-technology companies, Genetec, Chiron...they are not accidentally surrounding these campuses, because they're consulted, owned and operated by the same people who pretend to be truth seekers, that have no other interest but finding the truth on campuses, and they're moon-lighting or double-timing at companies where they make millions of dollars. That is sometimes very good. That is good for the economy, but it's not necessarily good for the truth. Because once you have a company put a million dollars on one view, you certainly don't push the alternative view that could threaten that investment. And that's happening in Berkeley just as well as at many other universities.

So the bio-technologists would like nothing better than a viral disease because now they could make test kits for the antibody. Twenty million AIDS tests are performed per year at \$50 apiece. Twenty million times 50 is a nice number for a bio-technology company to start. You can also make a vaccine at a bio-technology company and you can multiply everything again with a factor of a million. You can make AZT. But if you deal with drug addiction or with homosexuality or heterosexuality or God knows what, then you have to call in Mother Theresa and nobody has any money for any studies.

So for the bio-technology company, viruses are first-rate, but a human problem is not very viable and commercially highly uninteresting. And even the gays preferred a virus over alternative causes because a virus is an egalitarian disease. Nobody is going to look into your lifestyle and say, "Okay, you're doing this, you're doing this, you should get this." God gave the virus, nobody can argue with God, and we can easily come up with slogans-"We are all in this together," which they all say. Elizabeth Taylor is in this together, although Elizabeth Taylor comes to the dinner and some other people die of AZT and some other causes of AIDS. Nevertheless, we're all in this together.

And even the journalists loved it. It was a windfall for the journalists. The science writers had to sit in the laboratory in somebody's lab, and listen to what is a nuclear reactor, how does it work, how can I sell it in my next Sunday magazine article. Now, all they have to do is call Anthony Fauci or some other expert on AIDS research, touch it up with a little anal intercourse and intravenous drugs in the bathhouse, and have their next story for the Sunday Times. Everybody would love it and everybody would read it.

So it was a windfall in terms of public relations and commercial interests, but if you look at the public health benefits of the virus/AIDS hypothesis, that we have known since 1984, since that famous press conference, its achievements have been a complete disaster, a total failure, not even one life has been saved. We are spending on this virus more than on all viruses and microbes in history combined. The U.S. taxpayer pays four billion dollars annually on AIDS research, one billion on basic research, three billion in care. No one life has been saved. No vaccine has been developed. No drug has been developed except AZT. This I think is AIDS by prescription. It's the most toxic drug ever approved for long-term consumption in the free world. It was developed 20 years ago for chemotherapy, that is to kill human cells, when you have no other way of removing a cancer, that's what it does. There are no side effects, there's nothing other than killing cells. That's what it does. It just killed Arthur Ashe last month, in January, Kimberly Bergalis a year ago, and 200,000 people are on AZT owing to this one hypothesis now in this country alone, every six hours they take chain terminators of DNA synthesis.

So you cannot even come up with effective prevention. AIDS continues to spread despite hundreds of organizations educating, condoms, clean needles, and nobody has achieved control of the spread of AIDS. So in terms of public health benefits, the virus hypothesis has been a complete failure. But that is not even the final verdict on a scientific hypothesis. There are other hypotheses that are correct but still have not produced any results. The hallmark of a scientifically correct hypothesis, however, is when it can make valid predictions. That is the hallmark of the good hypothesis. A good meteorology hypothesis can predict whether it's going to be sunny or rainy tomorrow, it cannot change the weather.

We can say on the basis of genetics that the odds of getting hemophilia, if the hemophilia gene is in the family, are 25% or 50%. We can do some symptomatic treatment but we cannot cure hemophilia at this point. That's the hallmark of a good hypothesis.

Now what can the virus/AIDS hypothesis predict? Can it predict who is getting AIDS? It predicted exactly what you would expect from a viral disease-it would explode into the general population. But it didn't explode into the general population. As in the first year, AIDS is still restricted 90% to men, among them 30% intravenous drug users and 60% gays, and a few hemophiliacs and transfusion recipients. It did not explode. The virus hypothesis failed to predict the epidemiology of AIDS.

If you are infected today, you ask your doctor, "When do I get AIDS?" He could tell you, maybe next month, maybe next year, maybe five years from now, it could be ten years from now, it could also be 20 years from now, or it could be never. Any decade now, you could get AIDS. That's not a very helpful prediction to make. That's true almost with life. If you're talking decades, life is running out pretty fast, because it's not forever.

If you ask your doctor, what do you get? What do I get, I'm infected today? Well, it could be dementia, but it could be just as well diarrhea, it could be Kaposi's sarcoma, it could be lymphoma or pneumonia, diseases which have absolutely nothing in common, at least many of them. Totally useless predictions.

Despite the billions of dollars in AIDS research, nobody has an idea how HIV is causing AIDS. In fact, here's one of the major flaws in the hypothesis altogether: The T-cells are disappearing but they are not infected by HIV. One in 1000 at the most is infected. There is no precedent anywhere in the literature of biology or even microbiology that a cell that is not infected is dying from a virus. Viruses are what you call intracellular parasites. They have to get into the cell and then they mess up the machinery of the cell. They cannot send a signal, "Okay, I'm staying here, I'm too busy with something else, but you're going to die over there." Viruses cannot work that way. They have to get into the cell, then they can do something, whatever it is. But they certainly cannot kill from a distance. That's what the virus hypothesis is asked to explain. It cannot. It comes up with co-factors and other things.

There are other problems. AIDS is new, but it turns out that HIV is probably as old as America, if it's not older. But how do we measure the age of the virus, particularly one that we don't know yet so well, only for eight years. But it is the law in epidemiology, based on epidemiologists from the last century, who have actually observed that when a new microbe or new disease comes into a population, it spreads exponentially-it explodes, exactly like Heckler and Gallo predicted for AIDS. That was a very logical thing to predict. Because it will spread into susceptible animals, or in this case people, according to susceptibility.

Very much like we heard this morning about the diseases that came to California when the white man came with the Bible, the gun, with syphilis and tuberculosis. Within months, 95% of the Indians were dead. They could read the Bible, they could use the gun, but they died from syphilis and tuberculosis. The same thing happened to the Eskimos, the same thing happened to the Hawaiians when they were discovered by the white man. That's how new diseases spread in a population. Or when a new flu strain comes in, susceptible people, usually nowadays the old and the very young, get sick or some of them die. Then the population becomes resistant. The survivors become resistant and the virus either equilibrates or disappears.

Now look at the pattern of HIV in the population. Since we can test, I agree that it's not a long time, but it's long enough to draw a conclusion. Take, for example, cytomegalovirus and herpes virus, which is in the middle of the curve. That is found in 50% of Americans and Europeans, ever since we've had the tests available. This chart only starts in 1985 because the HIV test started then. On that ground, you can say that it's a long - established virus, it's an old virus in the population. A hypothetical new epidemic, like the flu epidemic which I'm showing here, would come up in a season, peak, and disappear.

Now look at Candida and Pneumocystis, so-called AIDS diseases. These are fungi which are normal inhabitants, guests in our lungs and on our skin. They are in 100% of the population. Now look at HIV. The numbers are small, but they are based on an enormous amount of testing, over 20 millions AIDS tests are conducted in the United States per year; 10% of the population, essentially. Twelve million blood donations are sampled for HIV, 2.5 million men in the Army, recruits are tested. The United States Job Corps is tested. Maternity clinics are tested. AIDS patients are tested. Altogether 20 million tests.

On account of these tests, one million Americans were found to be HIV-positive in 1985 and one million Americans were found to be HIV-positive in 1992 and again in 1993. HIV is a totally long-established virus and on the grounds of this type of epidemiology, you can extrapolate this curve back 200 years. It's as solid as that. You can say the virus came with the immigrants 200 years ago to this country. It's an old, long - established virus, but AIDS is a new disease. It's not a good candidate for a new disease.

Now we say AIDS is sexually transmitted. Is that true? The AIDS orthodoxy has tested transmission of HIV and we have a beautiful experimental group to test it on, the American hemophiliacs. There are 20,000 American hemophiliacs. 15,000, or 75% of them, have HIV, owing to blood transfusions from before the AIDS test. So for ten years now, they are HIV positive. According to the virus hypothesis, they should virtually all be dead. The reality is that the hemophiliacs are now getting twice as old as they did only 15 years ago. They have never done better than they do now in the history of hemophilia, where 75% of them or 15,000 have had HIV for ten years.

It's a good record for HIV. Logically, you could argue, if you were a total HIV fascist, you could say HIV has doubled the life of hemophiliacs. (Laughter.) I'm not insisting that's true, but it is consistent with the facts.

They have provided a group to see how readily HIV is transmitted sexually, by sampling the spouses of hemophiliacs. Scientists have found that less than 10% of their spouses, who had lived with them on an average of ten years now, have picked up HIV from sexual contacts. On that basis, again, it was calculated that on the average, 1000 unprotected sexual contacts are necessary just to pick up HIV. Then a latent period of ten years is to follow. So we can see it is a lot of work to pick up HIV. So it's a lot of work; you need a lot of contacts.

In other words, no virus, if it were a sexually transmitted virus, could ever survive on that basis. Evolutionarily that would be a hopeless condition. There is no virus that could live as a sexually transmitted agent if it depended on 1000 sexual contacts. Typical venereal diseases are transmitted at a much higher efficiency. Gonorrhea, syphilis, and herpes are transmitted at an efficiency of almost 50%. If you have sexual contact with someone who has gonorrhea, the chances for you to pick it up is at least 50%. On 1000 contacts, nobody could make a living.

The only way HIV could survive is if it had another, more secure mode of transmission. And that is known—it is perinatal, like all other retroviruses, in mice, chickens, monkeys that we have studies ad nauseum I would say over the last 30 years. They are all transmitted from mother to babies. And anything that is naturally transmitted perinatally is harmless because anything that would be harmful and dependent on perinatal transmission would be a fatal combination. The baby would die, the mother would die, and the microbe would die. Microbes that are perinatally transmitted in nature are harmless. E. coli is among them. Hepatitis-B virus is naturally transmitted from mother to baby. 90% of the natives in Africa or Australia have the virus. It's transmitted because it goes through the guts; you don't have a shower or a diaper service. The mother wipes the baby and there's the virus. And the baby doesn't get sick. That's how polio was naturally transmitted, in the old days. Only when the natural chain of transmission was interrupted, then it become pathogenic when you first encountered it at the age of 15 or 20.

So HIV is clearly a perinatally transmitted virus and therefore not pathogenic. If a virus or microbe that is normally not transmitted that way is perinatally transmitted accidentally, like syphilis, the consequences are disastrous. The baby can be blind or can die from it, that occasionally happens, but it's not the natural mode of transmission.

Another argument that is against the virus hypothesis, and that's one of the worst, the most clear-cut, came up last summer at the Amsterdam International AIDS conference. It was called by several writers the Amsterdam Surprise. There were dozens of AIDS cases, in risk groups, that were HIV-free. They had pneumonia, they

had Kaposi's sarcoma, there were hemophiliacs with pneumonia, there were gays with Kaposi's, there were junkies with tuberculosis, but did not have HIV. So, they called them HIV-free AIDS cases and everybody was alarmed because there was a new virus. There was no new virus. Now we have actually a perfect cover-up on the part of the CDC. They gave it a new name that nobody can pronounce, you can't even use it for Scrabble, it's called idiopathic CD4 lymphocytopenia.

It's a wonderful name. It won't appear in the Los Angeles Times, Nature, or Science because nobody can remember what it was. When there's no HIV, essentially we call a disease by the old name, as long as it's not AIDS. So that in fact would have been the strongest argument, again, one of the most clear-cut arguments, if a disease is found in the absence of a hypothetical cause, then it must be another cause that would have caused the disease. But we don't hear about that much.

Now, in this case, if we were scientists, if we didn't have a four billion dollar research budget or a grant and our companies would depend on it, and thousands or millions of patients would have been told "You are antibody positive; you won't get life insurance, you can't be in the Army, you can't have a relationship, you'd better take AZT." We have actually prescribed for them AZT...then it's too late to be scientifically honest. You have to continue whatever your cause is.

But since we have among us alumni, we have an open mind, which is an unusual problem, then we can reconsider. We can say, "What should we do?" We should apply what's called the scientific method. The scientific method is that you make an observation, in this case it was the observation that AIDS is a new disease, what could it be? Could it be an infectious agent? Right, that's a legitimate hypothesis. Then you test the hypothesis and see does it work, if it explains the observation, if it makes valid predictions, then your hypothesis is good. If it doesn't, which AIDS surely doesn't, (the viral hypothesis is a complete failure, in results and in predictions) then you'd better make a new hypothesis. That's what you expect from a graduate student and even from a professor. (Laughter) So, if we want to make a good hypothesis, then we want to analyze first what we actually want to explain. What is AIDS? We have to have a quick look back at AIDS. Is AIDS actually something that can be fitted with a common cause? Let's have a look at AIDS. AIDS in America is very difficult to reconcile with a single cause, because only about 62% of all American AIDS diseases are immunodeficiencies. Let's say you were to hypothesize there is an agent, virus or a drug, that would eliminate the immune system, which could readily explain 62% of American AIDS cases, which are pneumonia, Candidiasis, all sorts of microbes that move in, as I said, when the door is left open on Telegraph Avenue.

But there are a full 38% of AIDS diseases in America and it's almost the same in Europe, totally different in Africa...I'll come to that in a second...that have nothing to do with immunodeficiency. There are either Kaposi's sarcoma, which is a cancer,

lymphomas, which is also a sort of cancer, there are dementias or wasting disease which is not microbial. There is a weight loss similar to anorexia or cachexia. You lose weight, like typically junkies do, without an infectious agent that is associated with it. Those add up to 38% of AIDS cases. They are not immunodeficiencies and cannot be explained by the loss of T-cells. You may have no T-cells whatsoever and your IQ could be exactly the same as somebody who has an active immune system. The same is true for cancer. Cancer is not the consequence of immune deficiency.

So, it's not easy to find a common denominator and thus a common cause for such heterogeneous types of diseases. Second, when you look at the so-called AIDS epidemics of different continents, you will find monumental differences, as you will see on the next slide. Just compare the United States, Europe, and Africa. You see, the American and European AIDS epidemics are the same and the African is totally different, like day and night. 90% of all European and American AIDS cases are males, but in Africa they are sexually distributed evenly, like all other infectious diseases, in fact, like most spontaneous diseases.

The American and European AIDS patients all come from these risk groups, which are already listed, mainly intravenous drug users, male homosexuals, hemophiliacs, transfusion recipients. The African AIDS patients come from everywhere; they're from the general population. If you look at the diseases...we already went through some of them. On the left column are the European diseases and American diseases. On the right column are the African diseases. There is overlap between them, but the overlap is less than 10%.

So clinically African AIDS is essentially tuberculosis, diarrhea, and fever, and European and American AIDS is pneumonia, Candidiasis, Kaposi's, wasting disease, and so on. There is overlap, but they are certainly very different in their major distribution.

The annual AIDS risk is a curiosity. If you can take the number of antibody-positive Americans, estimated at one million, 30,000 to 40,000, now more like 50,000, get AIDS, like 3 or 4% per year. But if you look in Africa, the World Health Organization says there are six million HIV-positives and only about 30,000, at least in the past couple of years, have annually been reported to have AIDS. So, the annual AIDS risk for an HIV-positive person in Europe and America is about 3-4% and in Africa it's 0.3%. See, you already learned something very practical from this talk. If you are antibody positive, immediately move to Africa, (laughter) and your odds of getting AIDS are 10 times lower. That's very straightforward.

So from these kind of comparisons, you can clearly see we are dealing with two entirely different epidemics, and epidemiologically, 50 and 90% male are extremely different. There is no infectious disease that is ever so unevenly distributed. Virtually all of them are 50%. So it is very difficult to find a common cause. Even within America, we have different risk groups and we have different sub-epidemics that

have totally different risks and have totally different diseases. Most characteristically, the male homosexuals who are HIV-positive, they have an annual AIDS risk of about 5%, 4-6%. That translates into a so-called latent period of ten years for 50% of them to get AIDS. That's just another way of expressing it. It makes it more easy to compare...that's why I put it together in that table, on an annual basis.

Now you can see, the homosexuals are almost the only ones who ever develop Kaposi's sarcoma. I'll give you a reason why that is. But the American transfusion recipients have a much higher risk of developing AIDS when they are HIV positive. It's about 50% per year. But they get never anything like Kaposi's or dementia or wasting disease. They always get infectious diseases, primarily pneumonia.

The American babies also have a higher risk than the homosexuals and the intravenous drug diseases. Their diseases are mostly neurological diseases, retardation and dementia, and bacterial infections, which until January, 1993, were not seen in other groups.

So different groups have different diseases and as you can see from the annual AIDS risk, spanning from Africans to Americans to recipients of transfusions, they vary over 100-fold. That is totally incompatible with a common cause or a common infectious agent. There is not one virus, not one microbe, that is so selective and so different in different groups, in different countries, or causes different diseases on top of it. It's virtually impossible that this is due to a common cause.

Now, if you were to decide what AIDS is caused by, you should ask first...we should have asked at the beginning, is AIDS actually an infectious disease? Even the CDC considered lifestyle interpretations until the famous Gallo-Heckler press conference. Because that came from the NIH, it was binding to all public health institutes in the country, to the CDC, to the National Institute of Drug Abuse, and to all recipients of research grants, which means everybody who is doing research in the free state universities in this country. Like it or not, they all depend on Robert Gallo, Sam Broder, and Anthony Fauci for their grants, because otherwise their machines would stop grinding because these universities could never pay for the equipment that we need in the laboratory. It all comes from the central government. We have totalitarian science directed entirely from Washington in hypothetically free universities. You can survive with tenure but you certainly cannot run a centrifuge or pay your graduate students or write a paper if you don't have a government grant.

So the government controls the scientists totally centrally, even at universities that represent themselves as reservations of academic freedom, which has long been sacrificed due to the high costs of high technology which we are practicing now.

Now, if we wanted to distinguish between infectious and not, here are the hallmarks of infectious diseases versus non-infectious diseases: All infectious diseases, zero exceptions, all of them, viruses, bacteria, fungi, you name it, are equally distributed

between the sexes. Of course, if you look at a narrow enough group, if you look at a monastery, that is male or female, which is what they do in cohort research, you'll find it all of the sudden infecting only the boys or the girls. But if you average it out over 250,000,000 Americans, 200,000,000 Europeans, or a billion Africans, you will always find it equally distributed between the sexes. No exceptions.

All infectious diseases strike within weeks, days, or at the most, months of infection. There are no slow viruses or slow microbes. There are slow virologists, but no slow viruses. (Laughter) The reason is very simple. Microbes are very simple in design. They have generation times of minutes or hours or days. And for them, the human body or animal body is a hundred liters of juice in which they replicate as fast and as much as they can. There is no control for that. They take what they can get. The only restriction for them is the human or the animal immune system. A good immune system stops them right at the border. As soon as they penetrate host territory, it says "Here's the enemy-stop it." So it's an asymptomatic infection.

If the immune system is poor, they penetrate deeper into it and if there is no immune system, then bye-bye host. The microbe takes over. That takes weeks at the very most. Microbes are essentially self-replicating toxins. Let's say a cigarette is considered a toxin. We have to smoke 20 years to build up enough toxicity to get lung cancer and emphysema. With a microbe, you need just one cigarette, because that cigarette makes billions of cigarettes right in your own body. That's what a microbe is like. It's a self-replicating toxin. That's why microbes are fast or never. It's not to say that it can't come back or hang in there for a long time, but the rule is that they strike now or never. There is no precedent for a case where you say, "I was at wild party, it was wonderful, but doctor, would I get a venereal disease?" The doctor says, "When was the party," and the patient says "Four weeks ago," so he says "Don't worry, it's okay."

But not nowadays. You have a great party. You ask the doctor "Do I get AIDS?" And he says, "Come back ten years from now?" [You say] "What do I get?" "Well, diarrhea, dementia, can't say." It doesn't even matter with whom you slept. If the person you slept with had diarrhea, you could have Kaposi's sarcoma 15 years from now. That's totally inconsistent with the virus hypothesis. Nothing like that ever existed before in virology or microbiology. The disease followed soon or it didn't follow. The y can come back. Virus reactivation and things like that. But the primary response is now or never.

Now look at non-infectious diseases, what the characteristics are: They spread non-randomly, depending on exposure to the toxin. Smokers are almost the only ones who get lung cancer and emphysema. Others can get it too, but it is very rare. It is very strictly restricted to these risk groups. Liver cirrhosis is common among those who drink a bottle of Schnapps per day and other sources. And those who drink tea, you hardly ever see cirrhosis. The diseases do not follow after the party when you take

drugs. Everybody, even the President, occasionally exhaled some drug (laughter) but it takes a long time and yet it would be nice to be close to him...secondary exposure I guess. (Laughter).

You could have a party on cocaine with two or three or five or ten and you get out of the gutter, take a cold shower, brush your teeth, and eat some vitamins and you're fine. But if you do it every day for ten years, that's what's euphemistically called the latency period of the virus. Then you check in with pneumonia. Then you find a little virus there.?? That is how drugs work. You have to smoke two packs of cigarettes for 20 years before you get pneumonia or before you get emphysema and you have to drink two bottles of Schnapps a day for 20 years before you get liver cirrhosis. The drugs, they have "latent periods" because the human body is designed to live with a lot of junk, we grew up on this planet when it was much less hospitable than it is now. We were living with a lot of dirt. We are designed to take a lot of intoxication before we succumb to it. But we were not designed to inject cocaine three times a day for ten years. That is a very recent development in the history of the human race. And that is what can break down the immune system after a long time.

So, my hypothesis is very simple, therefore: AIDS in America and Europe, not in Africa, is exclusively the consequence of the long-term consumption of recreational drugs such as injected drugs, cocaine and heroin, and unfortunately AZT, which is by far the most toxic drug that has ever been approved for long-term consumption in the free world, and is now prescribed if a patient has antibodies to HIV as AIDS prophylaxis, and those who have already AIDS, as AIDS therapy. That is one of the most toxic drugs out.

So, how can I back up this hypothesis? Chronologically, the drug use epidemic in America and subsequently in Europe started after the Viet Nam War. Here are some data from the Bureau of Justice Statistics: In 1980, the Bureau of Justice Statistics reported seizures of 500 kilograms of cocaine in the whole United States. In 1990, ten years later, they confiscated 100,000 kilograms of cocaine. Perhaps you recall there was a garage confiscated with two or three tons of the good stuff in it, 100 tons confiscated two or three years ago. A couple of tons were confiscated three years ago. The number has gone up since.

So the consumption of cocaine has gone up 200-fold in their books. They estimate they confiscate 10% of the good stuff. Ten years ago, and the same percentage now, because as soon as Congress approves an increased budget for the drug agencies, the drug lords get immediate higher payments on the street and can double their equipment as well. So the amount that is confiscated has stayed exactly the same.

Amphetamines, the consumption has gone up 50-fold in the past ten years, according to the Narcotics Bureau, from 2 million confiscated to 100 million confiscated. And again, they estimate they confiscate 10% of the stuff. So if you multiple that by ten, you have 100,000,000, that's divided by four or five doses for every American. Since

I didn't use mine in that year, there's a little more for a couple of others. 250 thousand Americans used nitrite inhalants in 1980. That trend is declining; it's going down. Most of them actually were the gays. Eight million Americans are currently using cocaine regularly, which is not terribly well-defined; that means several times a week.

(Gap in lecture while changing tapes.)

80,000 of the 250,000 American AIDS patients are intravenous drug users. Almost all heterosexual AIDS patients are intravenous drug users in America. The same is true in Europe. Now the biggest risk groups, though, are male homosexuals. The CDC and also the Narcotics offices do not take oral drugs like poppers, nitrite inhalants, and so on very seriously. Cocaine, yes, but not the others. They are not recorded as health risks 10% of Western men and perhaps women are considered to be homosexual. That is 8 million adult male homosexuals in this country, the same percentage in Europe. But only 25,000 of these, 0.2%, gets AIDS. We're talking about a small minority, that minority that is said to practice risk behavior, which have many sexual contacts, record numbers of them, hundreds, sometimes even thousands. Those records are not achieved with the conventional sex drugs, that is, testosterone and estrogen. Like in the Olympics, the records in the bedrooms are now broken with chemicals. Here is a list of chemicals that are used.

This is a CDC statistic: shortly before the virus hypothesis was published by Jaffe, a group of 170 AIDS patients, 96% of them have reported regular use of nitrite inhalants. Nitrites are the mutagens and carcinogens that were known to molecular biology and in my opinion are the direct cause of Kaposi's sarcoma and also pneumonia. Ethyl chloride inhalants, cocaine, amphetamines, phencyclidine, you add up the percentages and you can see that everyone has used at least several of these drugs at once. In 1987, a group in San Francisco, almost exactly the same numbers, again from the CDC from public health studies reporting these numbers.

So the drug use correlates very well with those gays who are at risk for AIDS and with all heterosexuals who are intravenous drug users. The remainder are the hemophiliacs and transfusion recipients. They have diseases that would have occurred in the absence of drugs. That has to do with their condition, and we can explain those in a minute.

Now in order to prove that drugs rather than HIV are the cause of AIDS, we would have to show that among those who are HIV infected, only those who also use drugs get AIDS, or we have better yet controls in which drug users without HIV get the same diseases. Here are a few examples of both of these predictions:

Here are some groups...here is a group of 65 intravenous drug users from New York that were persuaded or asked to go into a medical program. I think it was half of them, I'll have to check that, continued to use drugs. They could not be persuaded.

They came to the clinic but they continued to inject drugs. They lost 35% of their T-cells per year over a two-year period. The group that didn't continue the drugs, that was either on methadone or withdrew altogether, maintained their T-cell level from the point where they entered the study.

A similar experiment was published in Zurich in Switzerland, which had a rather liberal drug policy. They handed out drugs and needles. Those who continued on drugs for a year or two after the program started had three times the incidence of AIDS-defining diseases like pneumonias and T-cell deficiencies compared to those who had discontinued the drugs.

Here in Los Angeles was a group of 11 persons on AZT. They all gave up AZT a year ago, it was published in The Lancet, in favor of an experimental vaccine. Ten out of eleven recovered cellular immunity within two weeks. It was in The Lancet. So AZT was clearly highly involved in suppressing the immune system. Well, the bone marrow is one of the most susceptible parts to AZT chain termination because it's one of the fastest growing cells in the body. It's killing the bone marrow. That's essentially what I'm saying. It's AIDS by prescription.

There are other examples of AZT recipients when they discontinue it, they recovered from muscle atrophy, or they recovered their bone marrow when the AZT was discontinued.

Here are some examples of people where we are comparing the same diseases in the same risk groups in the absence and presence of HIV. These would be the HIV-free AIDS cases. They would be called officially by the Center for Disease Control now, more recently, ICLs, idiopathic CD4+ lymphocytopenia diseases. I've practiced a lot; now I can say it with little hesitation in between. (Laughter)

So now look at New York City intravenous drug users, reporting in Science, one of the major AIDS journals these days. There were something like 50 cases with and without HIV. They had exactly the same diseases, the same pneumonias, the same tuberculosis, the same endocarditis. There was a group of homosexuals in New York who had all used poppers. All of them had Kaposi's sarcoma; not one of them had HIV.

Again, a group of intravenous drug users in New York who had been followed for 20 years. Their T-cells had declined way down to below 200 or 400. Only 2 out of the 21 were HIV positive in that example.

In Sweden and in Germany, the mortality of junkies with and without HIV was compared and was found to be exactly the same. In Amsterdam, 300 junkies were compared for HIV. They had all immune deficiency. Immunodeficiency is based on T-cell counts and is based on symptomatic infections. 100-something were HIV positive; 200 were HIV negative. They had exactly the same diseases. Again, in New

York, intravenous drug users with fever, weight loss, night sweats, diarrhea, and mouth infections, all classic AIDS diseases-the same with and without HIV.

Here in San Francisco, crack babies, babies born to mothers who use drugs during pregnancy, that was published last year, 8 with HIV, 20 without HIV, had the same mental retardation, neuromotor problems, and developmental retardation. Another study had 19 babies born to drug-addicted mothers. 18 were HIV-free; one was positive, and all had the same immunodeficiencies.

So, the conclusion is that drugs can easily explain the American AIDS epidemic and they resolve all of the problems that the virus/AIDS hypothesis has failed to do. Here's just a few of them: How come is AIDS new when the virus is old? Well, AIDS is new because of the drug epidemic in America. It started after the Viet Nam War and escalated over 100-fold in the past ten years alone, according to the Bureau of Justice statistics and those from the National Institute of Drug Abuse. Why are males the only targets in Europe and America? There again, we have the answer if we look at the numbers from the Bureau of Justice statistics and also European statistics.

Males consume 80% of the hard recreational drugs, that is cocaine and heroin. Women are far behind in that regard. They are catching up. It doesn't mean they're smarter, you see. It's like smoking. Smoking started with men. Men had lung cancer 20 years ago exclusively. Now women are catching up, proving that they're not smarter than men. (Laughter). Now the same is happening with AIDS. Women are catching up with AIDS and women are injecting drugs more than they did 15 years ago.

Gays are the only sexual group that use consistently drugs for sex. There again, I'll point out it's a very small minority. And they use nitrite inhalants to facilitate anal intercourse. Nitrite inhalants were used initially, prescription drugs a hundred years ago, to relax smooth muscle, to prevent heart attack and angina, in small doses like 0.2 milliliters. People who are on those drugs usually don't live very long and you can't look at long-term side effects. But users of sexual aphrodisiacs, as they are used, or sexual stimulants in gay bars, in sometimes milliliters, 50 milliliter doses. That's what a dose is called in that instance. And some of the gays came into the hospital with 75% of their hemoglobin oxidized to methemoglobin from inhalation of nitrite inhalants.

As I said, they are the traditional carcinogens in cancer research and mutagens in genetic research. And they are considered harmless by the medical orthodoxy! They tell you, make sure your condoms are clean and your needles are shiny...that's all you have to worry about. We are not cops...drugs are fine. That's unfortunately what Project Inform tells its clients in San Francisco: Drugs are fine; viruses are dangerous. And here we go continuing inhaling classical mutagens and carcinogens at milliliter doses, when we know for years that they are carcinogens and mutagens.

So it explains the maleness of AIDS in the Western world. In Africa, it's equally distributed because it's not a drug disease in Africa. In Africa, AIDS builds out of malnutrition, parasitic infections, and poor sanitation.

Now, why did AIDS science go wrong? Here we are, essentially science is progressive, we know everything and we think we have everything under control. It's not easy to explain to many people, but we are under the spell of the only triumph that medicine...virology...has really ever achieved in terms of public health benefits. And that is the elimination of infectious diseases. Starting with Pasteur and Koch and ending with Salk and Sabin, with the elimination of polio.

And in the spell of this and the admiration of the germ theory, everybody in the medical profession, immuno-biology, is inclined to look for an infectious agent long before they want to consider alternatives, which are much less popular and much less solvable. And look, the price for this is enormous. In the 20s, the U.S. Public Service, the precursor of the NIH and the CDC, decided that the pellagra epidemic in this country that killed tens of thousands of farmers was an infectious disease, transmitted very much like AIDS, by sex and poor hygiene. Until a doctor...a pharmacologist from New York, finally discovered it was a nutritional deficiency that turned out to be a vitamin B deficiency.

Most recently we are saying that cervical cancer in women is due to human papillomavirus. Ten years ago, it was herpes virus, you remember. There was just a study at Berkeley. It studied 400 female students on the Berkeley campus. 250 were papillomavirus positive. In reality, 50% of all women in this country have these papillomaviruses and men have them too, and the incidence of cervical cancer is totally independent of it. The percentage of women with cervical cancer with and without papillomavirus reflects exactly the percentage of papillomavirus in this country. No evidence whatever.

AIDS is said to be a viral disease and is in reality is drug disease. The most recent example is chronic fatigue, which is said to be a yuppie or female disease. It's also said to be a retrovirus now. That's coming up in the literature now.

So, my conclusion then is, if I turn out to be right, this would be a very testable, very easy hypothesis to test. We could feed the drugs that I blame AIDS on, readily to experimental animals and it would be in fact a picnic to find human volunteers as well. We could check those effects on them and see whether these drugs are pathogenic. There's plenty of literature to document that these drugs are all pathogenic. They have been in the past and are now, and there is even now some data that these drug s are all pathogenic. AZT, nobody has to ask a question about it. It was developed to kill cells and it does it exquisitely well. Nitrites are mutagenic and carcinogenic, and cocaine has traditionally caused pneumonia, weight loss and tuberculosis, way back in the early part of the century when the first cocaine users

were studied in Vienna and Paris around the days of Sigmund Freud when everybody thought cocaine was totally chic, it even was in Coca-Cola then in low doses.

It is also totally testable epidemiologically. And that's really a shame, considering the money that is spent in AIDS research, that this is not done. We could take a hundred hemophiliacs with HIV, 100 without, matched for all parameters, and see who gets AIDS diseases. There is not one such study in the AIDS literature that has ever shown that HIV causes AIDS diseases. There are 80 studies alone that I know that show the opposite, that show it makes no difference, but they are not advertised.

Equally well, this could be done with intravenous drug users. You could compare a hundred with and without HIV, or gays with and without HIV. No controlled study is ever done because it would threaten or perhaps kill the virus/AIDS hypothesis.

So, in my opinion, then, AIDS is a totally preventable disease and could in fact be a largely curable disease if we would consider it as a toxic disease caused by recreational drugs. I conclude by sort of dedicating this to all those who are unfortunately misled by the current hypothesis, all intravenous drug users and all drug users, the victims of AZT, who were never told that these drugs cause AIDS diseases, and to all those antibody positives, and there are millions, unfortunately, who were never told that the HIV hypothesis is unproven, and as we know recently, based on four fraudulent papers. The papers by Gallo, on which the hypothesis is based, are found to be fraudulent on several counts by the Office of Research and Technology of the National Institute of Health.

Thank you very much. *