

INTERVIEW WITH DR.ROBERT GALLO

BY

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1 P R O C E E D I N G S

2 MR.LAMBROS: Dr. Robert Gallo, first I thank you
3 very much for taking your valuable time to provide this
4 interview for the Greek daily Newspaper "ELEFTHEROS TYPOS",
5 Athens, Greece, for the Greeks to be informed what exactly
6 you are doing in this crucial time on the disease of
7 HIV/AIDS.

8 DR. GALLO: You're very welcome.

9 MR.LAMBROS: I understand that in Athens on May 3rd
10 you are going to deliver a speech at the "Megaron Mousikis"
11 along with your co-founder Luc Montagnier of the Pasteur
12 Institute in France. And I wonder what prompted you to
13 appear with him in Athens at this particular time? Is there
14 a specific reason?

15 DR. GALLO: Yes. I was called by an old friend.

16 MR.LAMBROS: By whom?

17 DR. GALLO: I was called by an old friend.

18 MR.LAMBROS: Friend, okay.

19 DR. GALLO: And he convinced me that --

20 MR. LAMBROS: She or he?

21 DR. GALLO: He. He convinced me that this was
22 important for Greece, for Athens, and that it would be very

1 wonderful, very good and I would be doing a good thing, and
2 I won't regret it, etcetera.

3 He also told me I would see some other old friends
4 that are waiting for this to happen, and therefore, the
5 temptation was plentiful. It was more than one reason, and
6 I looked at the calendar. We worked out appropriate dates.

7 He wanted to do it with Montagnier, I said that's no
8 problem. We've done things before, especially in the last
9 decade, and I would be very happy if that would be the case.

10 MR.LAMBROS: Are you planning to take this
11 opportunity to make any special announcements vis-a-vis the
12 HIV virus. since you will be in Greece, where Hippocrates,
13 the first man of medicine and the doctor, was born?

14 DR. GALLO: I wish there was something very
15 specific that we could say is truly an announcement. I
16 suppose many of the things that we say will be in
17 announcements, because some of those things will be news.

18 We have some progress on the vaccine. We have
19 some new approaches to therapy. None of these things would
20 I regard as dramatic, you know, AIDS is ending. You know,
21 we've got for sure the vaccine.

22 It's not like that. But we could also tell you

1 about progress in bringing treatment to Africa. I could
2 tell you about progress with developing new drugs, why we
3 need to develop new drugs because of the drug resistance and
4 toxicity.

5 What's progress in the world on vaccines? What
6 are the remaining problems? What's the progress from our
7 Institute, which is very -- I must say is very interesting
8 at the moment. We can talk about all those things. I don't
9 want to use any one of them as an announcement *per se*.

10 I have some talk. I will talk about some lessons
11 from the experiences of the past, and I will talk about some
12 prospects for the future.

13 MR.LAMBROS: Dr. Gallo, since this catastrophic
14 disease has become a global pandemic--*pandemia* as we say in
15 the Greek language--it appears to be a kind of weapon of
16 mass destruction, particularly in Africa where there have
17 been so many deaths from the 1980's to the present, how soon
18 do you foresee the possibility of finding a cure for
19 HIV/AIDS?

20 DR. GALLO: The cure means the person is already
21 infected and you're treating the illness, as opposed to
22 prevention and getting rid of the virus from the world,

1 which would come from a vaccine.

2 So if you mean a cure for the people already
3 infected, a cure, we have to first define. Okay, if that's
4 what you mean?

5 MR.LAMBROS: Yes.

6 DR. GALLO: Among the people, the 40 million
7 people that are now infected, among the people that will be
8 infected in the coming years, can we cure them? Will there
9 be a cure? That's the question you're asking.

10 MR.LAMBROS: Yes, yes.

11 DR. GALLO: The answer to that is, you must define
12 a cure clinical versus virological. A clinical cure means
13 that we can make the person live normal all their life, and
14 not have any, you know, any particular suffering.

15 In other words, they live to be in their 80's and
16 they don't have significant suffering. I would call that a
17 clinical cure.

18 A virological cure means there's no more virus,
19 and that you can forget about treatment. You don't need it
20 any more at all. So for the first, for the clinical
21 advance, clinical control, we've made already major, major
22 progress. Now I wouldn't call it a clinical cure, but major

1 progress.

2 It's possible, with new drugs, that you can
3 approach a clinical cure. But will we be able to stop the
4 drugs because the virus is gone? No. Not in my lifetime,
5 not in yours, not in even his will that be the case.

6 You can say can you conceive of a way to do that,
7 to get rid of every last virus in the body, every last cell
8 that harbors the virus? Theoretically, this is something
9 you could conceive.

10 The technology, however, is pushing the limit to
11 the extreme. The cost would be way too much for each
12 individual, and there's no guarantee you would reach it. So
13 on a practical scale, I do not see what you would like, a
14 cure so that no treatment is ever needed again. I don't see
15 that coming in anybody's lifetime.

16 MR.LAMBROS: What about the possibility, at least
17 for the time being, of preventing the spread of this deadly
18 disease with a vaccine? How far are we from finding a
19 vaccine? Is there any such possibility? Is there anything
20 that can be done in the way of prevention using a vaccine?

21

22 DR. GALLO: Yes. As you already said, prevention

1 can come from multiple ways. One is by education, of how
2 the virus is transmitted, and to avoid those things.

3 Another is by testing the blood and being sure the
4 blood supply is safe, right? Those are ways of preventing.

5 The education (inaudible) to not be promiscuous, to not use
6 drugs, IV drugs, which will transit viruses if the blood is
7 contaminated, and to have blood tested before you receive
8 it.

9 Those are all ways of prevention. We already know
10 they help. They are essential, but they're not enough.

11 MR.LAMBROS: What about vaccines?

12 DR. GALLO: By vaccine, no one in the world still,
13 no one in the world still can predict when. Something like
14 the last time a person of note, a notable person predicted
15 was President Clinton. About 12 years ago, he predicted
16 that we'd have a vaccine in works in less than ten years.

17 This should be a lesson, particularly from
18 politicians. Even those of us very close to the study of
19 the virus cannot predict. I can tell you that I would like
20 to leave this at the moment on a positive note, that whereas
21 five, ten years, it was very difficult to see a pathway, to
22 be sure of a pathway that should lead to a very interesting

1 vaccine candidate. We couldn't say that five years ago.

2 But today, because of our knowledge gained on how
3 HIV enters the cell, I think we could now begin to see the
4 pathway towards getting the job done. We are experimenting
5 in that pathway, and the results are encouraging.

6 But I cannot tell you I am sure we will have a
7 great, preventive vaccine in seven years, eight years, ten
8 years, 12 years.

9 MR.LAMBROS: Nothing in the near future?

10 DR. GALLO: No. I'm just semi-rational.

11 MR.LAMBROS: Of course, you're very rational.

12 DR. GALLO: Semi, semi.

13 MR.LAMBROS: Semi, semi, semi. Okay, I accept
14 your terminology.

15 DR. GALLO: No. I said semi-rational.

16 MR.LAMBROS: I get it. Do you expect any
17 effective new medications, with fewer side effects, for HIV
18 therapy until you find a cure?

19 DR. GALLO: Yes, yes, I do. The reason is there's
20 an enormous amount of knowledge on HIV biology, how it
21 causes disease, how it reproduces and it's giving new
22 classes of drugs.

1 Really, every few years we have new classes of
2 drugs, and we're going to see some of those drugs that are
3 going to be simply better than the ones in the past, and
4 we're going to find better combinations.

5 Time and experimental clinical results give us the
6 experience to know how to do things better. So yes, I
7 envision improvements. We do have the problem of drug
8 resistance.

9 MR.LAMBROS: Your Institution is in charge of those
10 drugs?

11 DR. GALLO: Well, it's not that there's no one
12 place, no one person that's in charge.

13 MR.LAMBROS: I know.

14 DR. GALLO: But the Institute is very deeply
15 involved in new drugs, yes. Drug development, and in drug
16 testing.

17 MR.LAMBROS: What about your cooperation with the
18 European Union?

19 DR. GALLO: No, no. It always sounds good to
20 collaborate. Everybody thinks it's so important,
21 collaboration. Collaboration is very vital when it comes to
22 public health. But when it comes to research for new ideas,

1 too much collaboration ironically or I shouldn't say
2 ironically, paradoxically.

3 Too much collaboration paradoxically can inhibit
4 new developments and new ideas, because competition is a
5 good part of it, you know I think. When you feel I want to
6 be better than you, he wants to be better than both of us.
7 So we're thinking hard, right?

8 If we're all cooperating equally all the time, you
9 can relax more. But for public health application, we need
10 to linked. Do you understand the difference? But for basic
11 science, it's good to have competition.

12 MR.LAMBROS: Your answer resembles Aristoteleios
13 logiki (Aristotle's logic).

14 DR. GALLO: You don't have to explain. I read a
15 little bit about him too, you know. I read about his
16 greatest fan.

17 MR. LAMBROS: And I like your answer. Have you
18 read Aristotle?

19 DR. GALLO: I read all the works of Aristotle's
20 number one fan, the person who loved Aristotle the most,
21 because he was Italian. So I read him: Thomas Aquinas.

22 MR.LAMBROS: I will focus you in the Nicomachean

1 Ethics (Ethica Nikomaxeia in Greek). Dr. Gallo, Let me to
2 ask you, from AZT to Atripla medications- if I'm correct?
3 Since I'm not a scientist, do you think that these
4 medications have many side effect? Do you believe they
5 can prolong lives and prevent more deaths?

6 DR. GALLO: Well, they have. I don't believe that
7 there's proof. There's not -- AZT alone was problematic,
8 problematic because it reduced the virus somewhat, but not
9 enough, and it had side effects.

10 But even AZT took away several of the
11 complications of AIDS. But now with the Atripla drug, it's
12 night and day. We don't have people in the hospital any
13 more. I mean we do, but it's very unusual compared to
14 before.

15 Everybody was in the hospital with HIV after five
16 to ten years. It was automatic, and you could simply say
17 your good-byes at the end of 10 to 12 years. They don't do
18 that anymore.

19 MR. LAMBROS: They died. It was a death sentence.

20 DR. GALLO: Right. You know the difference
21 between now and then. **How many people we know are 20 years,**
22 **you know.**

1 MR. LAMBROS: Dr. Gallo, how detrimental are the
2 HIV medications given to a healthy person, not infected?

3 DR. GALLO: Well, yes. The answer is you do have
4 a good idea, because today, we use them very early upon
5 infection. Those people are still pretty healthy.

6 So you've got good ideas today, even on a healthy
7 person, because the HIV-infected person, who's only been
8 recently infected, often is treated. That person is still
9 reasonably healthy. So there's plenty of information.

10 MR. LAMBROS: If any infected person, under HIV
11 therapy--we have about six to ten thousand in Greece--
12 stopped receiving the drugs for any number of reasons, what
13 would be the outcome?

14 DR. GALLO: Usually, it's not good. People have
15 done such experiments deliberately. Scientists, clinical
16 scientists believe that it was worth experimenting, to try
17 to stop the drugs. A few years back, five years ago, four
18 years, three years, people were doing experiments they
19 called structured interruption therapy.

20 They stopped it when people were doing well, to
21 see what happens. What happens was more negative than --

22 MR. LAMBROS: Yes, I heard that --

1 DR. GALLO: This is the problem. You want to give
2 the people a break in the drug. You want to, but it has its
3 hazards, because the virus comes back.

4 MR LAMBROS: Dr. Gallo, I have read that in some
5 cases, due to the appearance of serious medical problems,
6 some doctors have stopped HIV therapy. What happens to
7 those patients vis-a-vis the CD4 and viral load?

8 DR. GALLO: To the best of my knowledge, the
9 clinicians today don't want to stop therapy any more,
10 because too many things happen that were problems. The
11 people did worse, not better.

12 MR. LAMBROS: I will raise one more question and
13 then we can attend the event.

14 DR. GALLO: I will come back here first, we can
15 talk a little bit.

16 MR. LAMBROS: Yes! How do you explain the fact
17 that HIV has struck so hard on the Black community, the
18 Latinos in this country and most recently the people of the
19 Balkans as well. I read today what is happening in Poland,
20 Bulgaria and Romania.

21 DR. GALLO: That's not hard there. They don't
22 have the blood testing as accurately. They don't have

1 education as accurate. They don't have the population
2 tested as accurate or as effectively, and there are too many
3 social prejudices against HIV infection.

4 So when they do a test and somebody's positive,
5 that person tends to slip into the underground, potentially
6 thereby infecting other people and not being adequately
7 treated.

8 MR. LAMBROS: Now in the Balkans, there's great
9 concern because the number has already reached 750,000. As I
10 understand it, HIV/AIDS will be the number one issue at
11 the European Summit this coming June--Germany has the
12 Presidency-- because the disease is striking the Balkans.
13 How do you explain that?

14 DR. GALLO: That's not hard to imagine here in the
15 United States, why let's call the blacks, the black
16 population once more. If you're poor, you're often less
17 educated. If you're poor and you're in a community where
18 there's more crime, there's more drugs.

19 If there's more drugs, there's more HIV
20 transmission by drug addiction. If there's more drug
21 addiction, there's more prostitution. If there's more
22 prostitution, there's more drug addiction, and we have this

1 circle.

2 MR. LAMBROS: It looks like Aristotle's method.

3 DR. GALLO: It's not too complex. So drugs,
4 partly -- I don't want to say poverty. Plenty of poor
5 people don't get infected. But in the wrong climate, in the
6 wrong cultural environment, having less economic advantages
7 and less education promotes things that lead to drug
8 addiction and prostitution. Those things, as you well know,
9 lead to HIV infection.

10 And they have less therapy, and with less therapy,
11 the amount of virus you have is higher. If the amount of
12 virus is higher in my blood or in my semen, I transmit
13 easier.

14

15 MR LAMBROS: Dr. Gallo, as we are driving to
16 Washington, D.C., what do you think of a medication to stop
17 the mutation of the HIV virus--a big problem today?

18 DR. GALLO: That's a very interesting question. I
19 don't see any medicine that will block the virus' ability to
20 mutate, really anything on the horizon. But I do see the
21 possibility of drugs coming, that the virus will have less
22 chance to mutate against that drug.

1 In other words, there is classes of drugs that are
2 coming, that it should be much harder for the virus to
3 mutate against. So if that's what you mean, I am very
4 optimistic that we can get drugs that work and that the
5 virus will have a much harder time mutating against.

6 MR. LAMBROS: Dr. Gallo, a sensitive question.
7 Since you are a great scientist, I don't want to bring you
8 into conflict with some companies about the issue of
9 medications.

10 DR. GALLO: That's okay.

11 MR LAMBROS: Could you tell us today, which is the
12 best medication to be taken by those who are indeed infected
13 HIV virus?

14 DR. GALLO: There really isn't an answer to that
15 question that is simple, because it depends on many factors.
16 What's good for the people of, let's say, most of the people
17 in Athens, is not necessarily what's good for someone in
18 another area of the world, where they don't measure some
19 things so well, like the level of the virus, like the virus
20 mutation.

21 When you can't do those things, you're more likely
22 to select drugs that are less -- that the virus gets

1 resistance to less frequently, less easily, even if they're
2 not quite as effective right now, okay.

3 So you have to individualize therapy according to
4 evidence-based strategies, and the evidence varies for
5 different parts of the world, to some extent, especially if
6 you're considering some of the underdeveloped nations.

7 I would add to that, there are drugs that are
8 better in the early phase that you would choose. There are
9 drugs that are better in the very late phase, when there's
10 problems. There are drugs that you save to use only when
11 what we call salvage, when there's nothing else left to use.

12 A good example of that is like something called T-
13 20. You don't use it easily at the beginning, because it
14 requires injection. You're injecting a few times a day;
15 it's very inconvenient and it's more expensive.

16 But it's very good in salvage therapy, when people
17 are running out of drugs and people have been using this
18 class, which is an inhibitor, one of the kinds of inhibitors
19 of HIV entry into the cell. There are going to be other
20 types of inhibitors of HIV entry into the cell very soon.

21 So I can't give a magic formula to say "Well, use
22 AZT plus 3TC plus a good (inaudible) inhibitor." It's

1 really quite different. Moreover, it's also dependent on
2 the region in another way. In some parts of the world, for
3 example in Baltimore, we have drug resistance in the
4 population very widely among HIV infected people, to certain
5 drugs. But in Athens, that's not the case. You could use
6 that drug. We can't.

7 MR.LAMBROS: But in Baltimore you mean blacks?

8 DR. GALLO: I mean particularly in the black
9 population, but anybody in Baltimore who's infected has an
10 increased risk of a drug-resistance mutant. So you change
11 your strategy to some of the newer drugs right away.

12 So I cannot even say it's the same in Baltimore
13 for Athens. So I don't think -- it's an important question,
14 but the question really has no answer.

15 I could list what are all the drugs? Oh, there's
16 a large number of drugs, and some of inhibit reverse
17 transcriptase. Some of them inhibit the viral protease.
18 These are enzymes that the virus uses for its replication
19 cycle.

20 But now comes another class of drugs, integrase
21 inhibitors, the enzyme the virus also makes to integrate the
22 genes into the cell DNA. Then there are other classes of

1 drugs coming now that block the virus from coming into the
2 cell.

3 There are some new classes of drugs that are
4 targeting the cell in a gentle way. Viruses need the
5 machinery of the cell to reproduce. Not just their own
6 genes; they exploit the host, us, our cells. So if you
7 inhibit some things in our cell that the virus needs, you
8 can also block HIV.

9 Can you do it safely? Yes. Sometimes you can,
10 because you can inhibit just a little bit and you can block
11 virus. Those things don't mutate. It's a cell gene, so
12 they're not going to mutate, okay. The virus may escape by
13 going around it, another pathway, but this is an important
14 new approach for the coming years.

15 MR. LAMBROS: Dr. Gallo, due to the effective
16 medications, it's obvious that You keep the foxy HIV virus
17 at bay, as you say. May we assume that using these
18 medications, day by day, the virus is somehow becoming
19 weaker, or is it still strong enough to go inside the cell,
20 to pull the zipper and to create its own mechanism, and with
21 the first opportunity, is ready for the exodus?

22 DR. GALLO: As far as we know, all the variants of

1 HIV, almost all variants of HIV can still produce disease.
2 However, your question is a good one because some of the
3 viruses that mutate to escape the drug are weaker, at least
4 weaker in their ability to grow in the laboratory culture,
5 and weaker in their ability to harm T cells.

6 So it's possible that those people with resistant
7 viruses, those variants that are resisting drugs will not
8 produce AIDS with the same regularity and ferocity.

9 MR. LAMBROS: Dr. Gallo, let's go now to a very
10 controversial issue, which is not pertaining to your
11 interest but is very well known all over the world: the
12 issue of the Bulgarian Nurses, which has been reported
13 extensively.

14 DR. GALLO: First, it is in my interest, because I
15 already was involved in writing letters.

16 MR. LAMBROS: **Yes. My question is about the five**
17 **Bulgarian nurses and a Palestinian doctor who have been**
18 **accused of deliberately infecting 426 children with the HIV**
19 **virus. Some** have already died, somehow from pills for the
20 first time in history, some kind of substance, even by
21 injection. What is your opinion on this crucial issue? Do
22 you agree with this?

1 DR. GALLO: Of course not, and the reasons are
2 many, and they become stronger as I talk to you. Let's go
3 to the first reason. What motive would half a dozen people,
4 six people have to come together and kill 426 children?

5 What's the motive? What's the gain, other than
6 murder and the worse conscience not in history, but one of
7 the worst crimes of the modern era? What would be the
8 motive of these six people? What is the theory of their
9 motive? I mean this is silly to begin with, right? I mean
10 there's no possible motive.

11 You have to have all six are crazy and they're all
12 crazy at the same time, and they're all crazy with the same
13 idea.

14 MR.LAMBROS: Even with transfusion?

15 DR. GALLO: Why would they do it? Why? That's
16 number one. So you start with motive. There's no motive.

17 The second question. What's the evidence that
18 they did do it? Let's forget the conclusion for the moment.

19 What is the evidence the Libya has provided that they did
20 it? Has anybody seen the evidence? Has Bulgaria seen it?

21 MR.LAMBROS: Only from witnesses. They have been
22 saying that they saw nurses giving pills to the children.

1 As I was told, one of the nurses went to one room and asked
2 what those children were suffering from, and it was said
3 from chicken pox; and the nurses said that they brought some
4 very good pills, something like that, and gave them to the
5 children.

6 So the question is, although for the first time in
7 25 years they mentioned the word "pills, do you believe that
8 through your own research you found no substance, you found
9 a virus?

10 DR. GALLO: No.

11 MR.LAMBROS: No.

12 DR. GALLO: That's irrational (inaudible), right.

13 That's the third point. There's no evidence. Now the
14 fourth point, we get now to positive evidence, and even
15 conclusive evidence that they didn't. Scientific evidence
16 and the detective evidence adds to what I told you already.

17 That evidence is the Libyans claim there was no
18 HIV around in Libya. Of course, that is nonsense, and there
19 is evidence that the very virus the children had, that kind
20 of strain is in the hospital neighborhood, okay. People got
21 samples from the neighborhood of the hospital.

22 People that are infected with HIV are infected in

1 Libya, and there are people in Libya in the neighborhood of
2 the hospital that have a strain of virus that's like the
3 virus in the children. That's what I have been told by
4 scientists who were there, okay.

5 The next, number five, the scientist who I know
6 very well, who's very reliable, Vittorio Colezzi (ph) from
7 the University of Rome, number two, also known as
8 (inaudible), he was invited there to help as an expert.

9 He obtained hospital records, okay, and the
10 hospital records clearly show that a substantial number of
11 those patients were infected before the Bulgarian nurses
12 arrived, okay. That in itself is conclusive.

13 MR.LAMBROS: You told me earlier that you sent
14 some letters? To whom?

15 DR. GALLO: Well, let me finish. I'm going to
16 give you each point that we went through, so you have it.

17 MR.LAMBROS: Excellent.

18 DR. GALLO: We also know that those children,
19 number six, are at a high frequency of infection with
20 Hepatitis B and Hepatitis C, and that only speaks to
21 extremely sloppy hospital practices, which I believe are now
22 corrected.

1 Libya runs the risk now of no one wanting to go
2 there to help them in the future. Libya will be the great
3 loser because of this horrible game.

4 Who's going to go to Libya now? Are you going to
5 go? Are you going to go as a doctor to Libya to help, so
6 you end up in jail the rest of your life or maybe hanged
7 when you're trying to help them?

8 So in my view, it's extremely stupid by Libya to
9 do this. They reduced their trust from the West, and they
10 certainly -- they could have a lot of help in their AIDS
11 problem from the West. They have HIV. They have AIDS, and
12 it's not going to get better.

13 No doctors I know want to risk themselves to help.
14 So this is a very, very evil and very bad and very stupid
15 mistake.

16 MR.LAMBROS: A very important question. Some
17 scientists are claiming that an HIV infected woman cannot
18 infect a non- HIV infected man. Do you believe this?

19 DR. GALLO: No. That is not true. It's proven to
20 be transmitted both directions. It is true --

21 MR.LAMBROS: Why?

22 DR. GALLO: It is true that the virus is more

1 easily transmitted from men to women. Women are at the
2 greater risk. Men get infected from mother, at birth or by
3 breast feeding. Men get infected by drug addiction. Men
4 get infected by a contaminated blood transfusion in places
5 in the world where they don't test the blood properly.

6 But men also can be sexually transmitted. It has
7 been proven, but is more difficult than man to woman.

8 MR.LAMBROS: Dr. Gallo, let's go now to a personal
9 level: one of your closest associates, namely our mutual
10 friend, Dr. George Pavlakis (ph). May we have your opinion
11 about his scientific research in this crucial era, since you
12 know him very well, and he will appear with you in Athens.

13 DR. GALLO: Right. I would start by commenting
14 about George as a man. He is a very trustworthy person.
15 He's very loyal friend. He's not going to be loyal if you
16 are doing something wrong. He'll go away. But anything
17 else, he's a very loyal and deep and trustworthy colleague,
18 as a scientist and as a friend.

19 Now as a scientist, he is one of the best
20 combinations of molecular biology of human retroviruses,
21 both HIV and HTLV, the leukemia virus that we had found some
22 years earlier, HTLV-1, HTLV-2. They were doing leading

1 molecular biology with those leukemia retroviruses, and he's
2 doing leading molecular biology in HIV.

3 He is different than many molecular biologists,
4 because he has the capacity also, which is not unique but is
5 not common, to see the biology of what he's doing. He's not
6 afraid to move in new directions, to get into, for example,
7 areas that he had never been in before.

8 So I think George is a superior scientist and a
9 superior friend.

10 MR.LAMBROS: Dr. Gallo, on March 23rd, according to
11 reliable sources, you are celebrating your birthday in
12 Venice, and I wish you, of course, a happy birthday from the
13 bottom of my heart, because we need you as a contributor to
14 humanity. But meanwhile, with this opportunity, can you
15 tell us your age -- I'm not saying exactly -- you're about
16 70, but off the record. Whatever your age is.

17 DR. GALLO: Okay. I don't care.

18 MR.LAMBROS: You don't care.

19 DR. GALLO: What do I care? Nobody's going to make
20 me retire.

21 MR.LAMBROS: Exactly. Do you have any important
22 announcement about this deadly disease, HIV-AIDS, on the

1 occasion of celebrating your birthday?

2 DR. GALLO: If I made any important announcements,
3 it wouldn't be at my birthday in a palace in Venice. It
4 would be in Greece, for this is a meeting that several
5 people will come to, and which is coming earlier.

6 Venice for me is to be quiet and to listen to
7 friends and great scientists give talks. At the end, I will
8 make five minutes of a concluding remark, which will be
9 simply in the form of a thank you.

10 I will receive something in Venice that's special,
11 and I will obviously express my gratitude and my awareness
12 that it should be shared with everyone there. Anything I
13 have to say --

14 MR.LAMBROS: In Greece?

15 DR. GALLO: Yes. I don't want to tell you that
16 there's some dramatic announcement. That's not true. But I
17 will try to give the -- what I see as important progress in
18 many of the areas that you think is important.

19 Mr.LAMBROS: In the main entrance of your great
20 institute, when I was sitting and waiting for you, I read
21 *Inter alia* under the title "A Mission of Discovery"
22 "In a world where diseases like HIV and cancer are taking

1 increasingly heavy tolls, the Institute of human virology is
2 poised to take the next step on the path of discovery and
3 hope"

4 Two questions. Why you have connected HIV with
5 cancer? The second: do you hope, Dr. Gallo, some day,
6 somehow, you are going to find an end to this human tragedy
7 and catastrophe?

8 DR. GALLO: Okay. I'll certainly answer both
9 questions. The reason for interest in AIDS and cancer is
10 more than one. The first reason is that I came from the
11 National Cancer Institute, where Dr. Pavlakis currently
12 works. We were colleagues there.

13 Therefore, I had a career before AIDS of cancer
14 research. Some of the people who came with me from the
15 National Cancer Institute also had earlier careers of
16 cancer, who are now involved in AIDS. We never stopped
17 fully working on some aspects of cancer, although obviously
18 greatly reduced.

19 One of my many reasons, one of the many reasons to
20 get rid of HIV is to hope that there's a little time left to
21 return fully to cancer research. So that's one reason of
22 the connection.

1 The second reason is clinical, that there are --
2 there is an increased number of cancers, increased incidence
3 of cancer of certain types, those that are caused by viruses
4 usually, other viruses. They're increased in HIV-infected
5 people. So we see more cancer in HIV-infected people.

6 The third reason is that there's important
7 relatedness between cancer biology, cancer research broadly
8 and HIV and AIDS and HIV/AIDS research projects. That has
9 to do with viruses that may cause cancer, some that I
10 mentioned we found earlier than HIV that are also
11 retroviruses. The first retroviruses known in humans that
12 can cause a form of leukemia in young adults, involving the
13 T cell.

14 So we have retroviruses causing AIDS, we have
15 retroviruses causing leukemia and leukemia's a cancer.
16 Another relationship is the immunology. The basis of AIDS
17 is an immunological disorder, as you well know, and
18 immunology is very important in controlling cancer growth.
19 So the research again overlaps.

20 Some aspects of the molecular biology of HIV have
21 their impact in cancer research. And cancer research has
22 helped HIV/AIDS research, no question. So the research

1 tends to have some overlap.

2 The vaccine that we tried to get against HIV is --
3 I should say there are approaches by people doing cancer
4 research to try to develop cancer vaccines, and so we talk
5 to each other. So the relationship is not so far away as
6 you might expect, and those are the many reasons we have
7 listed it. Frankly speaking, it interests me, and I'm the
8 director.

9 MR.LAMBROS: As for the hope?

10 DR. GALLO: The second part of your question, yes,
11 has to do with really, I guess, the hope of getting rid of
12 HIV/AIDS? Yes. I don't think it's unrealistic. I believe
13 it's not fantasy to think that we can conquer HIV and AIDS.

14 But it will have to come from basic medical
15 research. It is important that people in the scientific and
16 social science communities are not fighting with each other
17 for money. I mention that because I have heard people say
18 "Oh, maybe too much money goes to science and not education.
19 We could do more to prevent HIV."

20 But they never should be competing with each
21 other. There should be enough funding for both. I say that
22 with the recognition, and that everybody should recognize

1 that all the practical advances that came in AIDS came from
2 basic science.

3 For example, showing the cause of the disease.
4 You wouldn't know HIV was the cause. It came out of basic
5 science. Being able to grow the virus properly came out of
6 the basic science labs. Developing the blood test in order
7 to make education possible. You can't have education
8 without the knowledge that HIV is the cause. You can't have
9 education without knowing who's infected.

10 The blood test also protected the blood bank. All
11 of that came from basic science. The drugs all came from
12 basic science. The ultimate answer is not education also.
13 Education is necessary. Blood screening is necessary, but
14 not sufficient to solve the AIDS problem.

15 Medical science will solve it with a preventive
16 vaccine. The problem is, I can't tell you when. We have
17 important advances in the last few years. Can we translate
18 those advances into a critical important vaccine? I believe
19 yes, but I can't prove it to you yet.

20 MR.LAMBROS: Dr. Gallo, do you know if you have any Greek
21 connection in your family?

22 DR. GALLO: Well, there's every Italian,

1 particularly southern Italian but probably all of them.

2 MR. LAMBROS: Kalavria area.

3 DR. GALLO: Well no. Let me go further than that.

4 First of all, you know that historically Italy and Greece
5 are connected many, many times. Shall we start with the
6 Greek colonization of the south of Italy? You know, they
7 were all over the place, not just Sicily but southern Italy
8 was Magna Greccia.

9 At least the Italians like to say Magna Greccia,
10 Greater Greece. Greater Greece, which is kind of funny.
11 You know that your friend, Pythagoras, spent some time in
12 (name).

13 MR.LAMBROS: Pythagoras of Samios (Pythagoras the
14 Samean).

15 DR. GALLO: Yes. He spent time in (name) with the
16 school, and this is south of Italy. You know Archimedes is
17 Greek, but he's Sicilian.

18 MR. LAMBROS: The mathematician.(Mathimatikos).

19 DR. GALLO: Yes! He was a Sicilian Greek. So we
20 are connected from the time of the Greek colonization of
21 Italy. Then you must know also obviously that the Romans
22 went over to Greece, and left their footprints and their

1 excretions --

2 MR.LAMBROS: There are so many monuments in
3 Athens.

4 DR. GALLO: Yes. So you know that already
5 obviously. Number three, you certainly know about
6 Byzantium, and the connection to the parts of Italy, right?
7 Ravenna was very connected with the City of Byzantium.

8 And you know that the Venetians a little later had
9 a little bit of involvement. So we know that these things
10 have some -- that we have some commonality historically many
11 times.

12 But I personally can tell you two things. One is
13 obvious, that my mother is a southern Italian. They come
14 from Puglia near Bari, which looks right at Greece, right.
15 She doesn't come from Bari, but in the old town. But you
16 know.

17 You know that -- you don't know rather something
18 very peculiar, that my father's family came from northwest
19 Italy in the Alps.

20 Supposedly nothing to do with Greece, but my
21 father's father's mother has the same exact last name, same
22 spelling, is as Dr. Contaratos (ph) mother. Her maiden name

1 is exactly the same. Now I don't know what's going on.

2 MR. LAMBROS: It's Greek connections.

3 DR. GALLO: It's connections of some kind. So
4 that's a good point.

5 MR.LAMBROS: Can you tell us who invited you to
6 Greece? The name of the person.

7 DR. GALLO: You know. Dr. Roussos (ph), right.
8 Harry, we call him.

9 MR.LAMBROS: Harry Roussos.

10 DR. GALLO: Yes, and he made a phone call. You
11 asked me before why I came. I said it was from personal
12 contact and the description that he made. I miss some of
13 the friends there also. It's nice to see Pavlakis in his
14 home. It's nice to see friend Contaratos after not seeing
15 him in so long. You know, his wife died of a brain tumor
16 not so long ago, and I want to see him. I know his
17 children, known him since the late 1960's. So long, long
18 time.

19 MR.LAMBROS: Dr. Gallo, the last question, because
20 I would like you to rest for a while. Since this story will
21 appear in Greece, in the entire country, what will be your
22 message for the Greeks, since everyone knows that you are

1 the founder of HIV, and everyone knows that somehow you're
2 going to find a cure in order to terminate this catastrophic
3 disease?

4 DR. GALLO: First, my message would be that I'd
5 love to go to Greece, and there's too much of Greece that I
6 don't know, because I'm in one place all the time. I'm
7 always in Athens, and I don't get a chance to see much more.

8 On this trip, I plan to be in Santorini also, I think with
9 Pavlakis and maybe Conterados, who's from there.

10 So that I should say my message starts with the
11 message of hello in friendship, and I really am happy to be
12 able to go to Greece.

13 The scientific part of things well, you put too
14 much burden on me. There's a whole field of people. The
15 responsibility is of a lot of medical scientists. But we
16 feel that responsibility. It's a little bit of pressure.

17 I want to say that HIV is not going to go away.
18 The only way it's going to go away in anybody's lifetime or
19 our children, or our children's children, it will take a
20 long, long time for us to adapt to this virus, so that it's
21 not harmful to us.

22 So it's going to -- if we don't solve it from

1 science, it's here to stay. So we have to solve it. We
2 have to do something, particularly for the people in the
3 developing nations. We have to get rid of this virus. I am
4 reasonably confident, I have good optimism that we can do
5 it.

6 But there are many messages. This is a research
7 disease area that needs society as a whole. For instance,
8 we need your support always until the problem is solved, to
9 remind the governments that the virus has not gone away, and
10 that we need medical research funding until it's solved.

11 Don't get tired of it. Don't say "Oh AIDS, AIDS,
12 you know. It's still there." Yes, it's still there. Don't
13 think the problem is solved because you don't hear about it
14 so much. Don't think the problem is solved because we have
15 some therapy that's good. It is not solved. For some
16 people in the world, it's still as horrible and worse than
17 ever. For all people in the world, it remains a danger.

18 I should also say that we cannot predict the
19 future of the epidemic. I cannot predict the sustained will
20 of the government and of people, the sustained commitment.
21 I can't predict the sexual habits of people. I can't
22 predict the success or failures of education.

1 In time, we have a lot of crazy notions, like AIDS
2 is not real. HIV doesn't exist or HIV exists but doesn't
3 cause AIDS. These are dreadfully, dreadfully, horribly
4 dangerous, harmful ideas and notions. They sound like it's
5 academic freedom. This is utter nonsense.

6 It's utter nonsense. It's like trying to make a
7 debate whether the sun rises in the east or rises in the
8 west. How can you debate this? There is more evidence that
9 HIV exists, and there is more evidence that HIV is the cause
10 of AIDS. In my honest judgment, and in the judgment, I
11 think, of any halfway intelligent worker, that when we have
12 for the cause of any human disease by a microbe or virus,
13 the evidence is overwhelming.

14 It should also be known to these people that every
15 scientific body that investigated this, WHO, UN AIDS, the
16 National Institutes of Health, the Pasteur Institute, the
17 World Health Organization, the National Academy of Sciences
18 of the United States, the Institute of Medicine in the
19 United States, all have concluded that the evidence here is
20 overwhelming that this is the causative agent.

21 MR.LAMBROS: Dr. Gallo, I forgot to ask something. May we
22 have your assessment of your last trip to Mexico City. How

1 was it?

2 DR. GALLO: How was the trip to Mexico?

3 MR.LAMBROS: You went to Mexico City. How did it
4 go?

5 DR. GALLO: Oh, I wasn't in Mexico City. I was in
6 Guadalajara.

7 MR.LAMBROS: Guadalajara is in Mexico.

8 DR. GALLO: Yes, in Mexico.

9 MR.LAMBROS: Yes.

10 DR. GALLO: Well, I mean Mexico has not yet a high
11 rate of infection. It's about like the United States
12 overall. But they haven't done enough surveillance, so they
13 have less information. It could be worse than they know,
14 and they acknowledge that.

15 I found the people of Guadalajara really intensely
16 interested.

17 MR.LAMBROS: It was a seminar?

18 DR. GALLO: No, more it was a lecture with 1,400
19 people, 1,500 people, 1,100 students and professors and
20 others. Not just me; I was the main speaker, but they took
21 about ten people from my Institute and five gave major
22 talks.

1 Then we met with them to establish collaboration.

2 So we're going to have an Institute of Human Virology
3 Guadalajara. There will be an Institute of Human Virology
4 Monterey, Mexico. There is already an Institute of Human
5 Virology for Nigeria.

6 MR.LAMBROS: So you found the people in Mexico
7 very intensely interested in that?

8 DR. GALLO: Absolutely, absolutely, absolutely,
9 and we're going to have an exchange of people very soon. In
10 Monterey, we already have had four people, young people come
11 from Mexico to work in our Institute. Now Guadalajara will
12 send some.

13 MR.LAMBROS: Is there any possibility of
14 cooperating with Greece, with the University of Athens?

15 DR. GALLO: That remains to be seen. Maybe when I
16 go there, we can find out. Of course, it's a possibility.
17 But maybe when I go there and talk to George Pavlakis, we
18 will see. Mexico is close to our border. I felt we should
19 be doing something for Latin America.

20 Nigeria is because we obtained a great deal of
21 money from the President of the United States, Bush, for
22 helping Africa and especially Nigeria.

1 So we are doing it. We have many Nigerians coming
2 in the Institute. We have many in our Institute in Nigeria.

3 Now I also told you that you asked me about cooperation,
4 collaboration with EU, and I don't like collaborating with
5 an entity that is so vague, so ephemeral, not ephemeral but
6 what is EU? I can't get a grab on it.

7 I mean they have programs, but they seem to be
8 almost contrived. So I collaborate with many countries in
9 Europe. We collaborate with people in Sweden. We
10 collaborate with people in France. We collaborate with
11 people in Germany, active collaborations with all three. We
12 collaborate with people in Italy.

13 I mean these are, you know, good examples. But I
14 don't have any collaboration with EU. I think those are
15 people at administrative levels that make agreement to do
16 something, but I don't know what happens. I find that
17 difficult.

18 What I also said to you is that collaboration is
19 important, vital when it's for public health, when it's for
20 practical, developmental application things. But in basic
21 science, I think even more important is competition, because
22 if you do something wonderful, I want to do it as well or

1 better. That's stimulates one, you know.

2 You were speaking about Italy and Greece before,
3 and I once read about the Florentine renaissance. When
4 someone was asking Benvenuto Cellini (ph), a goldsmith,
5 you know, why now? Why Florence? His answer was "What do
6 you mean? What would you do if your cousin down the street
7 made a masterpiece? You compete." You want to make a
8 masterpiece better, right?

9 MR.LAMBROS: Dr. Gallo, in conclusion, I'm a human
10 being, I'm not a scientist. But closing this interview, is
11 there anything that you would like to add for further
12 discussion, which by mistake I did not ask?

13 DR. GALLO: I can't think of anything at the top
14 of my head. You know, just keep in mind that the virus is
15 still around, and that we can't predict the future.

16 I did mention some reasons why we can't predict
17 the future. I forgot another reason, but we now see viruses
18 combining with each other, HIV different strains.

19 MR.LAMBROS: Oh yes, co-infections.

20 DR. GALLO: Yes, and so with this, when the two
21 viruses become one, pieces of one with pieces of the other,
22 I can't be sure of the behavior of those viruses in the

1 future either.

2 So there are many reasons that people still have
3 to be aware of this, and I want to say maybe this last
4 thing. That with all the tragedy and all the horror of
5 AIDS, there have been many good things that have happened.

6 I mean not just scientific, that the amount of
7 AIDS research that may help other fields of research, which
8 indeed definitely have happened, but also social. When I
9 began research on HIV or research in AIDS rather, before HIV
10 was even known, there was much less understanding of the
11 differences in the people's sexuality.

12 I think there's far more understanding, far more
13 tolerance and far more kindness by the majority of people
14 today than there was before, because of AIDS. In addition,
15 I can speak at least from my own country, the United States.

16 There is far more connection of industrial nations to
17 places, well most emphatically Africa. There's far more
18 concern, there's far more involvement.

19 I think we can say that historically, when you
20 write the history of this some day, the historians will say
21 there was a silver lining around the black cloud. But we
22 need to blow away the black cloud.

1 MR.LAMBROS: Dr. Gallo, thank you very much for
2 your kindness and your time to provide this exclusive
3 interview for the Greek media.

4 DR. GALLO: You're very welcome. I was very happy
5 to do so, and I thank you for your equal politeness and
6 kindness to me.

7 MR.LAMBROS: Thank you.

8 (Statement in Greek. Efxaristo poly!)

9 (Whereupon, the interview was concluded.)

10

11