Print Media

National HIV and AIDS Archives

#NationalHIVArchives

11th to 15th February 1987
AIDS test for new pilots

British Airways is to screen all pilot entrants for AIDS as a safety measure. Medical reports have shown that the crippling diseases associated with the AIDS virus can lead to a subtle onset of loss of memory.

BA would not publicly confirm the move yesterday and a spokesman would only say: "New employees generally undergo routine medical examination before they take up an appointment."

But it is understood the decision relates only to passenger safety considerations. British Rail, which last October sent an advice and information leaflet about AIDS to all its 150,000 workforce, is issuing safety guidelines for specific groups of workers who might be exposed to accidental contact with the virus.
Move on AIDS cure hunt

BY RICHARD EVANS

THE GOVERNMENT may direct much more positively than at present to speed the discovery of a cure: Mr Norman Fowler, Social Services Secretary, and Mr Tony Newton, Health Minister, are in talks with the Medical Research Council on the feasibility of a more central direction of government scientists' research.

Sir James Gowans, council secretary, said yesterday the aim was to develop an AIDS vaccine and to find ways of killing the virus in infected patients.

He said: "The work would go on throughout the UK involving many laboratories and many workers. There are lots of candidate vaccines to be tried. It is a huge task."

The council's programme was put to the Government in December. An announcement authorising action is expected soon. About £3m will be needed in the first year, rising rapidly thereafter.

Now scientists present proposals to the council before they receive a research grant and research is fragmented. The alternative under consideration is that the council should present its own ideas to co-ordinate research.
GPs AIDS query 'no'

Doctors have been asked not to inform insurance companies whether their patients are potential risks for AIDS.

Last night UCD Professor of Microbiology Dr. Irene Hillery told GPs that they should ignore a "lifestyle clause" in insurance proposals.

The question asked doctors to state whether potential clients behaved in a way which might leave them open to contacting the dreaded killer virus.

She was speaking at an open meeting of doctors in the Mount Carmel Maternity Hospital in Rathgar and said she was aware that certain insurance companies were asking these questions.

Professor Hillery said several doctors had asked her what they should do in such situations and she had advised them to leave the space blank.

"If enough people do it they will eventually drop it," she said.

Professor Hillery was replying to a general practitioner who said that the Irish Medical Organisation's ethics committee have been unable to give guidance on the matter.

To date, 16 Irish people have contracted the full AIDS condition, and nine have died. Two babies have the condition and one is said to be critically ill.
Irish Times
11th February 1987

AIDS AND
THE BISHOPS.

Sir, — It is presumed that John Gray (letters, February 4th) will experience the same distress when he reads the statement by the Archbishop of Dublin, Dr Donal Caird, as he endured when reading that by the Catholic bishops. In case he missed it, I quote:

Writing in the Church Review, Dr Caird said: “At present, self-control, fidelity within marriage, and chastity outside marriage would seem to be the only sure way of limiting the spread of AIDS.”

No mention of condoms, Mr Gray.

The Church of England’s Board for Social Responsibility made a similar statement in its evidence to the inquiry on AIDS being undertaken by the House of Commons Social Services Committee — Yours, etc.,

LIAM DEEGAN,
68 Cappagh Avenue,
Finglas,
Dublin 11.
New AIDS case reported in Cork

A new case of AIDS has been reported in the Cork area. This brings the total number of people suffering from AIDS and related diseases to 15. A total of nine people have died of the disease so far in Ireland.
£10m Aids funds ‘blocked’

By Nicholas Wood
Political Reporter

An application for an extra £10 million to find a vaccine against the Aids is being blocked by the Treasury, it was alleged last night. Medical Research Council sources claimed that its leaders feared that the new money might be delayed or withheld because of public spending constraints.

"The MRC has been told to go away and do its sums again," one commented.

Today, Lord Jellicoe, the MRC chairman and Sir James Cowans, the secretary, will outline their proposals, put to the Government in December, to the all-party Commons social services committee.

Yesterday, Mr Norman Fowler, Secretary of State for Health and Social Services, described the plans as an "additional dimension to our research programme".

As disclosed in The Times yesterday, the MRC is seeking approval for a programme of "directed research". Mr Fowler said that under this approach, the council would contact scientists and ask them to pursue particular lines of inquiry in the hope of developing a vaccine against the killer disease. This contrasted with the usual system under which scientists submitted their own projects for MRC support.

In the Commons, Mr Tony Newton, Minister of State for Health, gave a guarded reply to Mr David Crouch, Conservative MP for Canterbury, when asked about the programme.

"We are discussing these matters, but considering initiating a different way of fostering research into this vital area of Aids."

The Government has already allocated £27 million for a public education campaign and to pay for treating and counselling Aids victims. Yesterday’s disclosures point to a Whitehall battle over further funds which Mr Fowler is evidently confident of winning, despite the Treasury’s customary political clout in such contests.
Aids treatment gives a lift to Wellcome

On February 14, 1986, St Valentine’s Day, trading in Wellcome shares began on the London Stock Exchange. The shares quickly went to a premium on the 120p issue price, and with hardly a backward glance they now stand at just a shade under 140p.

Wellcome’s drug Retroviv is the first officially recognised treatment effective against Aids and it has fired the imagination of investors anxious to cash in on what they hope will be a big money-spinner. Yet there are many uncertainties. Retroviv does not cure Aids, but it helps to slow the progress of the disease, prolonging the lives of victims. It is very expensive to produce, and its price will, therefore, be high. It is not known how high demand will be for the drug — but so far there have been 36,000 diagnosed cases in the West, of which 18,000 are dead, and the numbers are doubling every 10 months.

Wellcome hopes to gain approval in May to begin marketing the drug, but analysts believe that to begin with profits are unlikely to be significant.

Meanwhile, profits growth is likely to be steady rather than spectacular. Mr Kevin Wilson, the drugs analyst at Phillips & Drew, the stockbroker, forecasts pretax profits up 20 per cent to £150 million for the year to August 1987, rising to £150 million in the following year.

Zovirax, the world’s first broad spectrum anti-viral drug, launched in 1981, has been Wellcome’s primary engine of growth. It has proved to be very effective in the treatment of herpes. It has still to be launched in oral form in Japan, but profits growth is expected to be slower than in recent years.

Some of its other major products, notably the antihypertensive Zyloric and the antibiotic Septrin, have come off-patent, or are in the process of doing so. Meanwhile, sales of its highly successful over-the-counter coughs and colds remedies, Actifed and Sudafed, are slowing in the US.

However, it is difficult to know what new drugs are in the pipeline. Some of those already announced may look less than thrilling. The new anti-epileptic Lamotrigine is aimed at a very small market while Acervastin is a broadening of Wellcome’s range of antibacterials and is not in any way a breakthrough.

However, viral research could prove to be a continuing fruitful field of research, beyond Aids. Zovirax appears to be effective in the treatment of shingles if used early enough. Effective marketing will be needed to make sufferers aware that shingles is not untreatable.

Excitement about Retroviv has taken the share price into the stratosphere. The prospective multiple of shares 1987 earnings is expecting a lot from a single drug but with so much attention focusing on Aids, it is hard to advise holders to sell, even at these levels.

BOC Group

The gas-fired engine of BOC Group was firing strongly in the first quarter. Recent optimistic predictions from the normally cautious chairman Richard Giordano suggested that 1987 would be a year to watch, and the evidence was there in the three months to the end of June.

Profit up from £45.6 million to £59.1 million — at the top of the City’s expectations, and the share price by 89p to 451p was more a reflection of the general stock market activity than a judgement on BOC.

The first three months is not necessarily representative of the full year, but what is apparent is the continuing rehabilitation of the carbon business, which has given the company headaches out of all proportion to its size. But last year’s £1.38 million write-off now seems to represent the nadir of this business, which was already showing signs of turning around in the last quarter.

Also chiming in with carbon products was the healthcare business in the US. Together they produced an operating profit of £32 million, up from £21.3 million. That can be expected to improve through the year as the company tackles the rationalisation that must follow the rapid expansion of its Glasgow oxygen supply business. This is not expected to start showing through until the end of the year.

The overall operating profit of £72.6 million was £1.8 million, but did not have the benefit of forward sales of currency which, in the same period last year contributed £3.4 million.

Even with a tax charge that was historically high at 32 per cent, the earnings per share rose 31 per cent to 7.93p a share.

Securicor Group

Securicor Group and its 50.77 per cent owned associate, Security Services, report continued steady progress. Profits before tax rose by 15 per cent and 18 per cent to £16.3 million and £12.3 million respectively.

Since being established nearly 20 years ago, express parcels delivery has become the group’s leading profit earner — last year it passed the milestone of carrying a million parcels weekly.

Cash carrying and the newer cash processing services both did well in the year. A new national secure transport service for valuables has now been introduced, called Safelink.

However, market hopes are pinned to the British Telecom cellular radio network joint venture Celnet. Fierce competition with Racal’s Vodafone is beginning to erode margins, but even so, Securicor reports that Celnet is developing faster than expected.

At prices of 193p for Securicor and 167p for its associate, the prospective multiples are approaching 20 times earnings — a reflection of the future returns from Celnet, rather than the near-term fundamentals of the parcels and cash-carrying businesses. The shares look fully valued.
Aids warning to be stamped on Valentines

FIVE million sweethearts will receive Valentine's Day cards on Saturday with a warning about Aids stamped on the envelopes.

The Post Office said yesterday it will make no exception for the most romantic day of the year in hammering home the anti-Aids message.

"This is a warning about a deadly virus which does not recognize such romantic occasions as Valentine's Day," said a spokesman.

But there is a way around the warning. The only post office in Britain which has its own special Valentine franking mark — at the village of Lover in Wiltshire — will not be stamping the Aids message.

Postmistress Mrs Lucy Southern, 53, expects to frank more than a thousand Valentine messages with her special postmark depicting two lovebirds and three hearts.

She said: "I would have thought the Post Office could have given it a rest just for Valentine's Day."

Meanwhile, the Department of Health said that scientists will not face disciplinary action if they refuse to carry out research into AIDS.

Reports that social services secretary Norman Fowler was considering bringing in emergency powers to direct research into a cure for AIDS were misleading, said a spokeswoman.

In America, Surgeon General Everett Koop is pushing television networks to lift a ban on condom advertisements to help halt the spread of the disease.
AIDS tests for pregnant women

UNBORN children and their mothers are to be screened for AIDS, it was revealed last night.

Pilot projects are likely to be launched in Edinburgh and Dundee this year, with the aim of compulsory tests being ordered for all pregnant women throughout Britain.

If a mother-to-be and her foetus are found to have the AIDS virus, the woman could seek an abortion.

The plan was made known last night when Medical Research Council chiefs were questioned by MPs investigating the AIDS crisis.

Although the proposal will be considered by Lord White-law's Cabinet AIDS Committee, it already has the support of Health Secretary Norman Fowler, and is expected to be officially adopted by the Government.

Sir James Gowans, secretary of the council, said the plan would enable hospital staff to explain to mothers-to-be 'the consequences for them and their babies.'

Combat

He told MPs: 'It might not be good news, but at least it would be definite.'

Doctors could also obtain valuable information for researchers chasing a cure for the virus which is killing two people in Britain every day.

Last week a plan to test all hospital patients secretly for AIDS was unveiled by Government Chief Medical Officer Sir Donald Acheson.

But this sparked off controversy over the ethical and legal merits of the scheme and may be dropped.

The idea was that widespread anonymous screening would improve the Government's knowledge about the spread of AIDS and help experts to prepare plans to combat it.

Since then Mr Fowler has warned the country to brace itself for a far more severe spread of the disease.
AIDS video for industry

BY JIMMY BURNS

The Industrial Society will next month distribute a video among its 10,000 corporate members in industry and the trade union movement.

The video, made by Wellcome, the UK pharmaceuticals company at the forefront of scientific research into a cure for AIDS, is an independent initiative. It is to supplement a government pamphlet circulated in November.

The society, an independent organisation that promotes cooperation between companies and employees, said the video was aimed "directly at the workplace, from the shop floor all the way up to senior management."

Wellcome's decision to make the video coincides with development of its anti-AIDS drug azidothymidine (AZT). The drug was behind the company's announcement in November that it was spending up to £120m on plant to seek an AIDS cure.
Survey of AIDS will be widened

NEW MOVES to measure the spread of AIDS were approved yesterday by MPs. The Health Minister, Mr Tony Newton, agreed to proposals in a backbenchers' Bill requiring carriers to be included in health authority reports on the prevalence of AIDS in their areas.

The problem of identifying the number of Human Immune Virus (HIV) carriers — those who carry the virus but have not shown signs of developing the disease — is worrying the Government.

The development came during the standing committee stage of the AIDS (Control) Bill introduced into the Commons by Dr Gavin Strong, Labour MP for Edinburgh East. It is the first piece of legislation directly related to the problem of AIDS to be brought to Parliament.

Dr Strong, whose city has been called the AIDS capital of Europe with an estimated 50 per cent of injecting drug misusers being identified as carriers of the AIDS virus, said it was important to identify the number of HIV carriers so most affected areas could be identified.

The committee agreed to a new clause requiring health authorities to publish the number of people tested for the presence or absence of HIV and the number who proved positive.—(PA)
Irish Times
12th February 1987

Sir,—Charlie is so right —
there is a better way! — Yours,
etc.,
KRISTYNE CANTWELL,
Krytreen Chalet,
Blacklion,
Greystones,
Co Wicklow. 17 12/2/86

AIDS

Sir,—Surely, surely, the letter
by B.M. Conroy (February 2nd),
was an essay in irony? — Yours,
etc.,
P. F. BRENNAN,
3 Northcliffe Heights,
Skerries,
Co Dublin.
AIDS: SCIENCE STANDS ON TRIAL

In the war against AIDS, scientific truth was among the first casualties. No one listened when Luc Montagnier at the Pasteur Institute in Paris said that he had found the virus that causes AIDS. Scientific journals and scientists preferred to hear what Robert Gallo was saying from the National Cancer Institute in the US. Gallo said that the AIDS virus belonged to the group of viruses, the HTLVs, on which he established his reputation. He was wrong, but it took a year for people to realise it. In the interim, blood went unscreened, spreading the virus further, a climate of distrust among the key scientists developed, spilling over into the courts. Scientific collaboration itself joined the list of victims.

Steve Connor

One year in pursuit of the wrong virus

IN THE FIRST few months of the AIDS "epidemic", there were a handful of wild speculations as to the cause of the syndrome. At that time, in 1981, people thought that the disease affected a relatively small number of homosexual men on the east and west coasts of the United States. AIDS could be the result of an "overload" of semen which suppresses the body's immune system. It could be due to "lifestyle"—sex, drugs and rock and roll. Or it could be the hand of God punishing sinners in a way that defies scientific analysis.

Science has since shown that a virus causes the acquired immune deficiency syndrome—AIDS. It was an important discovery: it could have led almost immediately to a test for whether people were infected with the virus. The test in fact came more than a year after the discovery of the virus. This delay occurred at a crucial time for blood banks and hospitals. Blood could spread the disease and yet blood banks could not tell the difference between good and infected blood. Without a test, contaminated blood transfusions and blood products such as factor VIII, the clotting agent needed by haemophiliacs, infected many more people with the virus.

Apart from leading eventually to a blood test, the discovery of the virus began to open the door to ways of treating patients with AIDS, perhaps even curing them. Knowing that AIDS occurred after infection with a virus meant that scientists could begin the formidable task of trying to develop vaccines to protect people from infection. If the world had not ignored the discovery of the AIDS virus, researchers might now be a year ahead in their fight to cure the victims of AIDS.

The discovery of the AIDS virus is now the subject of a legal row between two teams of researchers. On the one side is the Pasteur Institute in Paris. This institute claims that one of its research teams, led by Luc Montagnier, discovered the virus first. Montagnier then provided samples of the virus to the other group of researchers, led by Robert Gallo, head of the Laboratory of Tumor and Cell Biology at the US's National Cancer Institute, Maryland. According to the Pasteur Institute, Gallo's group then used the French discovery to develop its own test for the presence of the AIDS virus in blood. Gallo and his group acknowledge that the French discovered the virus first, but Gallo claims that he was the first to grow the virus in sufficient quantities to produce a reliable test. Gallo denies emphatically that he used the virus that Montagnier supplied in order to develop his test.

Montagnier's samples, Gallo says, failed to grow for more than a few days and so were useless.

The argument behind the legal tussle is as much about scientific fact as it is about two countries—both sides have the support of their governments—vying for a place in the history books. As scientists around the world begin to grow more and more of the AIDS virus taken from different people, it has become apparent that isolates of the virus—samples of virus from a particular individual that researchers can grow successfully in the laboratory—differ significantly in their genetic material. Scientists can measure the similarity of two viruses from the sequence of chemical compounds, known as nucleotides, that make up the DNA of the virus. Montagnier first described his virus in May 1983. Gallo's first virus, announced a year later, is said by some scientists to have a "remarkable" similarity to Montagnier's virus. So remarkable, in fact, that Gallo has now to face the possibility that, somehow, his sample became contaminated with Montagnier's. If this occurred, the question is whether the contamination was an accident or a deliberate act designed to give Gallo and his team the chance to announce their own
"discovery" of the AIDS virus.

Before Montagnier and Gallo made their discoveries, both had an inkling that a virus was responsible for the disease. In particular, both had evidence that a certain type of virus, called a retrovirus, was involved. Unlike most viruses, retroviruses have RNA as their genetic material, rather than DNA. To subvert the cells that they attack, retroviruses have first to convert this RNA into DNA, which is called proviral DNA. For this, retroviruses need an enzyme called reverse transcriptase. Gallo and Montagnier both detected this enzyme when they cultured and grew lymphocytes, a type of blood cell, from AIDS patients. The presence of reverse transcriptase in lymphocytes from AIDS patients therefore indicated that there was a retrovirus at work.

There are many types of retroviruses but, in early 1982, only one was known to infect humans. This virus, which is not the virus that causes AIDS, results in a rare form of leukaemia, which was first described in Japan. The credit for the discovery of this human retrovirus has gone to Gallo. He called the virus human T-cell leukaemia virus (HTLV), because it infected T-cells, a type of lymphocyte, and causes them to multiply uncontrollably, just like a cancer. In AIDS patients, these T-cells are destroyed. From the start, Gallo thought that the presence of the enzyme reverse transcriptase meant that HTLV, or a variant of it, caused AIDS. He has since been proved wrong.

The story of the discovery of the AIDS virus begins on 3 January 1983. The La Pitié Salpêtrière hospital in Paris sent a small piece of tissue from a homosexual man to the Pasteur Institute for analysis. The tissue sample consisted of a collection of cells taken from the lymph nodes of the patient, who was suffering from swollen lymph glands. This is a typical sign of the condition called lymphadenopathy syndrome, which often precedes full-blown AIDS. The researchers at the Pasteur Institute did not want to take a biopsy from a patient suffering from the later stages of the syndrome because such patients have a depleted number of T-cell lymphocytes. Because there are fewer T-cells in these patients, it is more difficult to analyse the sample.

The researchers, François Barré-Sinoussi, Jean-Claude Chermann and Luc Montagnier, began the task of growing these lymphocytes in culture. They wanted to see if they differed from similar cells taken from a healthy person. Barré-

"I have never seen the virus that Luc Montagnier has described, and I suspect he might have a mixture of two."

--Robert Gallo

Sinoussi and Chermann isolated the lymphocytes from the biopsy by cutting up the tissue and separating the cells by spinning them in a centrifuge. Once isolated, Barré-Sinoussi added anti-interferon to neutralise the interferon produced by the body—interferon seems to inhibit the growth of retroviruses. She also added T-cell growth factor, obtained, she recounts, from a French colleague, to stimulate the T-cells to grow. She added another chemical stimulant, called phytohaemagglutinin, to stimulate the T-cells to grow in culture.

Every three days or so, the researchers would dilute the growing number of T-cells, to avoid overcrowding, and at the same time look for viral activity. They did this by taking a sample of the culture, spinning it at high speed to concentrate any virus present at the bottom of the test tube. They then treated the pellet at the bottom of the tube with a detergent to open up the virus, and release reverse transcriptase, the enzyme that signals the presence of a retrovirus. Chermann and Barré-Sinoussi added a small piece of RNA along with chemicals, which were radioactively labelled, that the enzyme needs to make a DNA copy of the RNA. They then filtered
the solution. Reverse transcriptase was indeed present, so the big molecules of radioactive DNA made by the enzyme remained on the filter paper. If no enzyme were present, the smaller radioactive precursors would have passed through the filter.

This is a standard technique for detecting the presence of a retrovirus. The French team repeated it every three or four days. On 25 January 1983, Barré-Sinoussi discovered the presence of reverse transcriptase. She recorded the event in her laboratory notebook. The activity was very low, and inconclusive, she says. Two days later, she looked again: the activity had increased. It reached a peak on 7 February. On 11 February, the researchers detected that the activity was falling, "which both surprised us and made us anxious", Barré-Sinoussi says. The human retrovirus, HTLV, which causes a type of leukaemia did not produce the same effect. HTLV causes cells to multiply, whereas the virus in the French sample seemed to kill the lymphocytes the researchers were trying to grow. "This was our first suspicion that the virus we had was not like HTLV."

The French researchers immediately decided to add fresh lymphocytes from a healthy donor to provide a constant source of new cells for the virus to replicate in. After an agonising two weeks, they finally found that, by doing this, they could increase the amount of virus. They also found that they could take the solution left at the top of the test tube after it had come from the centrifuge, the supernatant, and use it to infect fresh lymphocytes. This meant the virus was present outside the cells that it killed. Each time, they found that the quantity of the virus increased, as detected by the presence of reverse transcriptase, and then decreased as the virus began to destroy the lymphocytes in culture.

In virology, as in most other spheres of life, seeing is believing. The French team quickly tried to photograph the virus at very high magnification. The researchers gave samples of the culture to an electron-microscopist at the institute, Charles Dauguet. On 4 February 1983, he saw the virus for the first time. Dauguet took better pictures on 29 March and 5 April. These appeared in the American journal Science on 20 May 1983 (vol 220, p 868), the first paper to describe the AIDS virus. Photographs of this virus were to add yet another twist to the saga later on.

Before publishing this paper, the French team wanted to establish as far as it could whether its virus bore any similarity to the only known human retrovirus, HTLV. To do so, the researchers needed to compare their virus against a specimen of HTLV. They asked Gallo to supply them with samples of cells that produced HTLV, and with antibodies to certain proteins of the HTLV virus. These antibodies are made by injecting HTLV proteins (the antigens) into animals so that their immune systems then make antibodies that attack these proteins. If the virus that the French discovered was similar to HTLV, then they should have detected "cross-reactivity" between the HTLV antibodies, and proteins from their own virus. In essence the HTLV antibodies and the virus's proteins should have become bound together like a lock and key. So the French added HTLV antibodies labelled with a fluorescent marker to a culture of cells producing their new
thrust of Montagnier's paper was that the new virus was very different from HTLV-I. As the French say in the opening sentence of the abstract, the new virus is "clearly distinct" from previous HTLVs.

Although this was the first paper to describe the AIDS virus, it could not show conclusively that this virus caused AIDS. The French had yet to confirm the presence of this virus in a large sample of people with AIDS—either showing early symptoms, or with full-blown AIDS. They also needed to show that it was absent from equally large samples of healthy people. For this reason, Montagnier and his team could only say: "The role of this virus in the etiology of AIDS remains to be determined." The importance of this paper, however, is that it was the first to describe the virus, with clear photographs of it emerging, or "budding", from infected lymphocytes. These photographs showed a clear distinction in the appearance of this virus and the two HTLV viruses already discovered. Under the microscope, the AIDS virus looks nothing like HTLV-I and HTLV-II. However, Gallo said last week that he and many other virologists were not convinced at the time that Montagnier had found a new virus. Nevertheless, he said, as a referee for Science, he urged the journal to publish the paper because he thought that Montagnier's work was important.

Unfortunately for Montagnier, his discovery went almost unnoticed. Outside, and even inside, the relatively small circle of retrovirologists, few people understood the significance of his results. One reason is that three other papers in the same issue of Science overshadowed his paper. All described a possible link between AIDS and the HTLV viruses. Two papers came out of Gallo's laboratory, the Laboratory of Tumor Cell Biology at the National Cancer Institute; and one from the Department of Cancer Biology at the Harvard School of Public Health, where a close collaborator of Gallo works. His name is Myron (Max) Essex. In one of these papers, Gallo describes the "Isolation of
Human T-Cell Leukemia Virus in Acquired Immune Deficiency Syndrome (AIDS)." The reader is left in little doubt that Gallo believed that HTLV could be the cause of AIDS. He published photographs of HTLV viruses found in an AIDS patient. These showed that the HTLV-I virus was clearly distinct from the virus discovered and described by the French. Gallo also said that the patient had antibodies to HTLV proteins. He also suggested further evidence to support his theory that a variant of HTLV-I caused AIDS. He said that the relative absence of AIDS in Japan, where HTLV-I is prevalent, may be because the people there have developed a resistance to the virus over many years. Alternatively, perhaps HTLV in other parts of the world has mutated, so causing AIDS.

The simultaneous publication in Science of these four papers—of Montagnier, Gallo and Essex—was no coincidence. Each knew of the other's paper. As so often happens in science, competing laboratories often have the opportunity to read and comment on each other's papers before they are published. The outcome of these simultaneous publications was that Science itself, in a new article, pointed to the link between HTLV, Gallo's virus, and AIDS. In this new article, the reporter for Science quotes Gallo and Essex extensively. The work of Montagnier, meanwhile, receives a cursory mention—in one sentence. The very journal in which Montagnier publishes his research failed to notice the true importance of the discovery while focusing on work that turned out to be wrong.

Abraham Karlas, a virologist at the Department of Haematological Medicine, at the University of Cambridge, is bitterly critical of Gallo because, he says, Gallo's focus on HTLVs is responsible for the delay in realising the importance of Montagnier's work. "A full year was wasted. In that time many lives could have been saved, many infections could have been prevented. Gallo's preoccupation with HTLV as the cause of AIDS led many people in the wrong direction at a critical stage in AIDS research." The sentiments are echoed across the Atlantic. Don Francis, who was the head of a group researching into AIDS for the Centers for Disease Control (CDC) in Atlanta, Georgia, says that Gallo provided "tremendous confusion" which hindered the ultimate aim of research into AIDS.

Other scientists, even though they are critical of Gallo's insistence on a link between HTLVs and AIDS, feel that these accusations are unjust. Gallo has provided useful techniques for growing retroviruses, they say, and no one should take the credit away from him.

Further research convinced the French team that its virus was nothing to do with the HTLV family. In the summer of 1983, Montagnier and his team called their virus lymphadenopathy associated virus—LAV. It was under a similar name—lymphadenopathy AIDS associated virus—that the French deposited their isolate at France's National Collection of Cultures of Microorganisms on 15 July 1983. Since then, the virus has been available to any laboratory wanting to conduct bona fide research into the disease.

At the same time, the French researchers were beginning to develop a test that would show whether someone had been infected with the virus. They found that they could not grow the virus in T-cells without having continuously to add fresh cells. It was the old problem of the virus destroying the cells in which it grew. They tried and failed to grow their virus in certain strains of T-cells that multiplied continuously. The work of Montagnier and Gallo had solved the T-cells. Montagnier, however, did succeed at the end of that summer in growing the virus in another type of lymphocyte, the B-cell lymphocyte, that had been transformed with another virus (the Epstein-Barr virus) so that the cells multiplied continuously in cell culture. Montagnier's aim was to grow the virus in sufficient quantities to make a test, without having to worry too much about cell destruction. The test itself is relatively straightforward. Once the researchers could grow enough of the virus, they could mix its blood serum, taken from a patient, with the virus or with cells in which the virus was growing to see whether any antibodies in the blood identify and stick to the virus. If this happens, the patient has antibodies to the virus and so has been in contact with it, and may still be infected.

On 17 July 1983, Montagnier gave Gallo an isolate of LAV. Gallo says he was unable to grow the virus. Montagnier therefore gave Gallo, at Gallo's request, another batch of LAV, on 23 September. Montagnier did this after meeting Gallo at a conference on 15 September at Cold Spring Harbor Laboratory in New York. More than 100 researchers attended this conference, which Gallo helped to organise. At this conference, Montagnier presented full details of the virus, including photographs, and early results with the test. He showed, for instance, that the preliminary results of his test were that he could identify antibodies to LAV in 22 of 35 patients suffering from lymphadenopathy, or swollen lymph glands, a proportion that often precedes full-blown AIDS. He could also detect antibodies to LAV in 7 out of 40 healthy homosexual men, and antibodies in one out of 34 control samples of blood from healthy heterosexuals. His paper made it quite clear that the French team thought that LAV was "clearly different" from HTLV and that the team has "conclusive evidence" that LAV represented a second group of human retroviruses.

Montagnier also told the conference that he had evidence that some of his AIDS patients, 14 per cent, were doubly infected with LAV and with HTLV-I. This could account for Gallo finding antibodies to HTLV-I in some AIDS patients.

According to Francis, who attended that conference, Montagnier's work was stunning because no one else could present so much clear evidence that a virus, LAV, was away from the cause of AIDS. His photographs were of a virus with a cone-shape core, which were totally unlike pictures of HTLV. Montagnier's paper appeared in a book published the following year, which was co-edited by Gallo. Ironically the name of the book (Human T-Cell Leukemia Lymphoma Virus, The
family of human T-lymphotropic retroviruses: Their role in malignancies and association with AIDS) classed LAV as part of the HTLV family. Ten days after this meeting at Cold Spring Harbor, Gallo wrote to a colleague in Europe and, said: "I have never seen the virus that Luc Montagnier has described. I suspect he might have a mixture of two." He subsequently explained that he had not meant this literally.

With its second sample of LAV that it sent to Gallo, the Pasteur Institute included a contract. This stated that the virus must be used only for research and not for industrial and commercial purposes. A research associate of Gallo, Mikulas Popovic, signed the contract. Barre-Sinoussi says that during the summer of 1983, she, Chermann and Montagnier began to be convinced by the evidence that LAV was the cause of AIDS. Their test for antibodies improved as they made more and more of the virus. The early results of using this test showed a clear link between the presence of antibodies against LAV and the onset of AIDS, as well as the full-blown syndrome.

They also detected a strong affinity of the virus to a type of T-cell, the T4 cell. AIDS patients have fewer T4 cells than healthy people. Barre-Sinoussi says that the work at the Pasteur Institute improved the specificity of the test: the French intended to purify the virus as best they could to ensure that the test did not identify people wrongly as having antibodies to the virus. On 15 September 1983, the French filed an application for a British patent on the test.

At this time, and for several months following, Gallo still believed that HTLV-I or a variant of it caused AIDS. He submitted papers to scientific journals on the association between HTLV-I and AIDS up to December 1983. Gallo says that the "real breakthrough" came early in November 1983. It was then, he said, that he attempted to infect a particular line of T-cells that were resistant to the virus he had isolated from American patients. The T-cells belonged to a cell line called HUT-78, discovered by Adi Gazdar of the National Cancer Institute in 1979. The particular subgroup of HUT-78 that Gallo used was called H-9. Gallo says that by the end of December 1983, he had enough virus to show that AIDS patients had antibodies to it. Gallo says he had found not only the virus, but a way of growing it in quantity in T-cells. In the same month, the French filed a patent for their test in the US.

At a meeting of scientists last November at the Royal Post-graduate Medical School in London, Gallo said that the results of his test at this time (December 1983) were "unambiguous evidence that this [virus] and this alone was the cause of AIDS". This statement does not explain, however, why Gallo submitted a paper on 12 December 1983 to Science, which still professed a link between HTLV-I and AIDS. Gallo said last week that this paper, published on 11 May 1984, was only trying to fill in the gaps of what he had found on the surface of T-cells infected with HTLV-I. It did not suggest that HTLV-I caused AIDS, he said. At the meeting in London last November, like other meetings elsewhere, Gallo gave the impression that he had the real AIDS virus all along. His problem was that he could not grow the virus, and was therefore confusing it with HTLV-I. Only after successfully growing lots of the virus in the H-9 cell line did he begin to see the virus as a new virus.

Other researchers also began to find the AIDS virus around the same time. Abraham Karpas at Cambridge found a virus in AIDS patients. His report, in December 1983 (Molecular Biology and Medicine, vol 1 p 457), went almost unnoticed. He suggests this might be because he showed that his virus was unrelated to HTLV, and so other scientists did not take him seriously when he suggested that the virus could cause AIDS. He says that as a result he had difficulty in publishing his research. After he had compared his virus with the French virus, he called the virus c-LAV, the "c" standing for Cambridge) because of the similarity between the two. Had he proclaimed a totally new virus, he says, then perhaps his work would have received wider recognition.

During the spring of 1984, the world began to wake up to the cause of AIDS. The French had also given their virus to the CDC in Atlanta. By March, the CDC had succeeded in growing the virus. News of a "variant" of HTLV-I began to leak out in April. An article appeared in the Wall Street Journal, followed by the Washington Post and the San Francisco Chronicle. Soon after these reports, New Scientist also reported that Gallo had found a third variant of the HTLV family which was the likely cause of AIDS (19 April 1984, p 3). The source for that story was Gallo himself, on the understanding that we would not use the information before it was due to be published in Science unless the story began to leak elsewhere, which it did.

On 23 April, the Department of Health and Human Services in the US, the ultimate paymaster for Gallo's laboratory, held a press conference in Washington DC to announce the "discovery" of the AIDS virus. The same morning, lawyers from the US government filed a patent on a test developed by Gallo. Gallo attended the press conference in Washington DC: so did Margaret Heckler, then the Secretary of the US Department of Health and Human Services. The outcome as far as the media was concerned was unequivocal: Gallo had discovered the AIDS virus, which he called human T-cell leukaemia virus type III, HTLV-III. Science carried papers describing the discovery of Gallo in its 4 May issue. This was almost a year to the day that the French had published a paper describing their discovery of LAV—a discovery that went virtually unnoticed now that Gallo had caught the attention of the media and had, in the eyes of the world, found the cause of AIDS.

23 April, 1984: flanked by Margaret Heckler, the US Secretary for Health and Human Services, Robert Gallo announces to the press, which had broken the story days before, that he has found the probable cause of AIDS. It is, he says, a cancer virus called HTLV-III. The media accepts his claim.
MR EDWINA CURRIE stepped into the AIDS debate yesterday, saying that "good Christian people" would not catch the disease.

The junior Health Minister also had advice for globetrotting businessmen on how to avoid catching AIDS on trips abroad — take your wife with you. And she warned young men going abroad on holiday this summer: Restrict your romantic activity to just holding hands.

Mrs Currie, speaking to Mersey Regional Health Authority in Runcorn, said: "Good Christian people who wouldn't dream of misbehaving will not catch AIDS.

"If business people think that they can go to some of the countries where AIDS is rife and have a 'good' night out and pick up a local girl, then they may bring home more than they bargained for," she said. — (PA)
Transfusion doctor dies from virus

Good Christians safe from AIDS — Currie

AN Eire doctor has died from AIDS it was confirmed yesterday. He worked as a consultant anaesthetist in a Dublin hospital.

Married, with children, he got the disease from contaminated blood after being treated for haemophilia.

The doctor had continued to work after the illness had been diagnosed.

He died in late December but his death did not become known until yesterday.

The case is to be raised in the Eire parliament by former Health Minister Barry Desmond.

It was also confirmed yesterday that 22 babies in Eire have been infected by the AIDS virus.

Most of them were born to drug addict mothers in Dublin.

Mrs Currie: holding hands acceptable.

Mrs Edwina Currie stepped into the AIDS debate yesterday, saying that “good Christian people” would not catch the disease.

The Junior Health Minister also had advice for globetrotting businessmen on how to avoid catching AIDS on trips abroad — take your wife with you. She also warned young men going abroad on holiday this summer: restrict your romantic activity to just holding hands.

Former senior Tory Minister Lord Boardman last night reacted sharply to Mrs Currie’s advice with his own suggestion for the armed forces.

Lord Boardman last night tabled a caustic written question to the Government asking “whether in the light of ministerial advice to globetrotting businessmen” that they should be accompanied by their wives, and whether male members of the armed forces should also be advised that they should be accompanied by their wives in overseas tours and exercises.

Lord Boardman, 68, the Westminster Bank chairman, later told the Press Association he felt Mrs Currie’s words were “an unfortunate slur on British businessmen travelling abroad.”

Mrs Currie’s remarks also brought a storm of protest from Labour MPs, Mr Robin Corbett (Erddington), a front bench Home Affairs spokesman, said: “It is insulting to those haemophiliacs who have been given the AIDS virus through dirty blood.”

Mrs Currie’s intervention came as the Southern Presbytery of the Reformed Presbyterian Church branded the Don’t Die of Ignorance publicity campaign against AIDS as disgusting, indecent and immoral.

“According to the publicity campaign the impression conveyed is that promiscuity is OK provided you use a condom. This is manifestly misleading,” it said.

“The Bible teaches chastity before marriage and faithfulness within marriage. This is the moral way to prevent the spread of the disease.”

Meanwhile, an opinion poll yesterday showed a massive 95 per cent of the public back the Government’s publicity campaign against the disease.
EDWINA IN AIDS STORM

Christians who do not misbehave won’t catch it, claims Minister

HEALTH MINISTER Edwina Currie said last night that “good Christian people” would not catch AIDS.

And she offered her own guidelines to avoid catching the killer disease.

She told BUSINESSMEN: if you’re planning a trip abroad, take your wife with you.

YOUNG MEN were warned: don’t let a holiday romance go further than holding hands. But medical experts immediately condemned her advice as unrealistic, patronising and downright wrong.

A spokesman for one London AIDS education project said: “She seems to be totally out of touch with reality.”

Mrs Currie, who was born a Jew and converted to the Church of England, told a meeting in St Tonner, Merseyside: “Good Christian people who wouldn’t dream of misbehaving will not catch AIDS.”

She was concerned that there was not enough publicity about the spread of AIDS among heterosexuals and prostitutes in other countries.

And she said: “My message to the businessmen of this country is that there is one thing above all they can take with them to stop them catching AIDS — and that is the wife.

“If business people think that they can go to some of the countries where AIDS is rife and have a good night out and pick up a local girl, then they may bring home more than they bargained for.”

Mrs Currie offered similar advice to “all the young kids who are busy planning their summer holidays.” She said: "

Turn to Page 2"
Doctors in Aids plea

By FERGUS BLACK

A CLAIM by the Catholic 23 hierarchy that the use of condoms would contribute to the spread of Aids was denied yesterday by a medical expert on the disease. And he called for an urgent upgrading of the country's sexually transmitted disease facilities and more counsellors to offer advice and help to the public.

Dr. Derek Freedman, chairman of the Society for Sexually Transmitted Diseases, and an expert on the Aids virus, said there was no scientific evidence to show that the availability of condoms promoted promiscuity and led to a spread of the disease.

Because there were those who did not hear the Church's message, the State had a duty to protect everybody, particularly those most at risk.

Dr. Freedman said doctors could not realistically expect the Church to promote or condone the use of condoms. For many people, their advice that the only reliable safeguard against the disease was through faithfulness to one's partner in marriage and through self-denial and self-restraint outside marriage was an absolutely safe and reliable way of avoiding contact with the virus.

But he warned that not everyone would heed that message and these were the people who needed protection.

Dr. Freedman said that Ireland now had the second highest number of babies born in Europe with the Aids virus, due to the high number of parents abusing drugs. It was extremely important that women with Aids positive antibodies did not become pregnant and that means of contraception were made available to them.

Calling for finance to be made available as part of the Government's campaign, he said we urgently needed more facilities to deal and cope with people who had anxieties about the Aids problem.
'Don’t force Aids patients on us'

DOCTORS should not be forced to treat Aids patients, says a surgeon.

The disease is mainly “acquired during some voluntary sexual perversion or mainline drug abuse,” and there should be separate units with voluntary staff to deal with sufferers, he says.

Senior registrar Peter Guy, of St Peter’s Hospital, Chertsey, Surrey, hit back at suggestions that doctors who refuse to treat Aids patients should be disciplined.

Condemned

But John Fitzpatrick, chief executive of the Aids charity Terrence Higgins Trust, last night condemned Mr Guy’s views as “pure prejudice” and threatened him with legal action for “inciting a breach of the peace.”

Mr Guy, 37, writing in the British Medical Journal, says: “There are not many transmittable diseases resulting in death which could be picked up in the operating theatre.

“Is it right that we should submit our staff, our families and other patients to this risk?”

But Mr Fitzpatrick said: “On his argument, doctors would never treat people with lung cancer if they had smoked.”

Mr Guy, who is married, adds: “Of course I would not refuse to operate on an Aids patient in a life-threatening situation, but I don’t feel that any sense of compulsion should be imposed.”

Labour health spokesman Dr John Marek, said: “This sort of attitude is totally irresponsible.”

A spokesman for the General Medical Council, which has the power to discipline doctors, said no rulings had been made about care of Aids patients, but the matter was soon to be discussed.
'We are a lot wiser'

By CATHY KELLY

IRISH people know a lot more about the killer disease AIDS than the ordinary British person — that's the view of AIDS expert Dr. Derek Freedman after looking at the results of SUNDAY WORLD's AIDS survey.

Dr. Freedman said the survey showed that Irish people were very clear on the ways in which you can be infected with the disease. "People really did know what the main ways of getting AIDS were — it was a far better result than in a similar survey done in the UK," he said.

"The ordinary Irish person certainly had a very high level of knowledge about AIDS."

Dr. Freedman, one of Dublin's leading experts on sexually transmitted diseases, pointed out that the vast majority of people questioned knew that AIDS is spread through homo- and heterosexual intercourse, and through sharing syringes.

He also thought it was encouraging that less than 20 per cent of people thought that casual sex could be dangerous, and they have a good idea of how to curb the spread of AIDS. "Forty-five per cent felt they should limit themselves to one partner," he explained. "That is as valuable as the condom."

"And it shows they understand the name of the game — that the infection is spread by multiple partners."

Dr. Freedman said it was obvious that the public see AIDS as a serious threat and want something definite done about it.

"Two out of three people feel that condoms should be publicly promoted — not just mentioned, but promoted. This shows a very responsible approach to disease prevention."

"The survey is very positive in that it gives a lead to the Health authorities as to what the public want and what is acceptable to the public."

Meanwhile, the Government's £1 million AIDS education campaign has been shelved until after the election because the Taoiseach doesn't want it to become an election issue.

**TV and radio blitz**

The campaign was due to have started this month with a television and radio blitz featuring advertising slogans like: "Bang? Bang, you're dead. Casual sex is like Russian roulette."

Dr. Freedman feels that the ordinary person on the street knows that casual sex could be dangerous, and they have a good idea of how to curb the spread of AIDS. "Forty-five per cent felt they should limit themselves to one partner," he explained. "That is as valuable as the condom."

"And it shows they understand the name of the game — that the infection is spread by multiple partners."
AROUND THE WORLD...

SOON television viewers in America's Mid-west will be confronted with a screen commercial that pulls no punches.

"I'm afraid," a young woman says. "AIDS isn't just a gay disease. It's everybody's disease. And everybody who gets it dies.

Reduce

"The Surgeon General says proper use of condoms can reduce your risk... I'll do a lot for love. But I'm not ready to die for it."

The advert, promoting a top brand of condom, is one of the new breed of straight-talking commercials that aim to hammer home the dangers of AIDS and the need to take precautions against it.

Only a year ago, they could never have been aired.

All the major networks had strictly refused to carry condom ads on the grounds that they might offend.

But despite heated protests from the Catholic Church, most people in America now feel that the crisis requires a drastic and direct approach.

In another condom ad, to be aired in San Francisco, a young man says: "I'm a nice guy. I go out with nice girls. These days some pretty terrible things are happening to some really nice people."

In this particular case, the TV station is donating all revenues from this ad to AIDS research.

All around the world, health authorities in many countries have also been grasping the nettle.

In West Germany magazines are carrying Government adverts depicting a cartoon of a man and a woman with the slogan: "Trust is good — condoms are better."

In Italy the state network has carried a five-minute programme showing drawings of couples in intimate acts and outlining the AIDS risk involved in each practice.

In Japan, pamphlets are being distributed and TV ads are scheduled for next month.

Expands

In Scandinavia, however, there are no problems. Public service ads promoting condoms are routinely shown alongside the road-safety films. In one cartoon commercial, the "F" in the word AIDS expands and is covered with a sheath.
The 'super' condom

By PAUL WILLIAMS

NEW anti-AIDS condoms are in huge demand among Dublin's gay community as the scare over the dreaded disease increases.

LAST week SUNDAY WORLD published Ireland's first comprehensive survey on the dreaded killer disease AIDS.

Today we report on further findings from the opinion poll carried out for us by Lansdowne Market Research - and further reaction to the survey in general.

We also look at some of the measures already being taken to try and control the AIDS disease which has already claimed nine lives in Ireland.

-The survey handbook a representative sample of 136 adults aged 16 and over, of 50 sampling points throughout the Republic of Ireland. All interviews were conducted face-to-face on January 82, 1987.

THE IRISH public is more mature and level-headed than the Government appears to think.

That's the view of Dr. J. Adaskin of Lansdowne Market Research, which carried out the special AIDS survey commissioned by SUNDAY WORLD.

"We wonder whether the Government would have been so patient if nobody was talking about AIDS," Mr. Adaskin tells us.

"The survey suggests the Irish are not much more worried about their sexual health than they are in other countries.

"But the survey suggests the public is not much more worried about their sexual health than they are in other countries."

"The survey suggests the public is not much more worried about their sexual health than they are in other countries."

Last week we exposed the myths about AIDS.

For the facts.

This week, based upon the "Don't Die Of Ignorance" leaflet distributed to every household in the UK, let's get you and your family to know about AIDS.

AIDS is not a death sentence, but it is potentially fatal.

It can affect anyone, regardless of age, sex or sexual orientation.

It is not contagious, but it is highly virulent.

The term AIDS refers to the Acquired Immunodeficiency Syndrome, a condition characterized by the deterioration of the immune system, leading to an increased risk of opportunistic infections and cancer.

AIDS is caused by the Human Immunodeficiency Virus (HIV), which is transmitted through blood, semen, vaginal fluids, and breast milk.

The virus attacks and destroys T-cells, which are white blood cells that play a crucial role in the immune system.

As the immune system weakens, the body becomes more susceptible to opportunistic infections and tumors.

AIDS is not contagious, but it is highly virulent.

To prevent spread of the virus, it is important to practice safe sex, avoid sharing needles, and follow proper guidelines for healthcare settings.

Support groups and counseling services are available for those affected by AIDS and their families.

In conclusion, while AIDS remains a serious and potentially deadly condition, it is not contagious and can be effectively managed with proper treatment and care.

The key to preventing the spread of AIDS is education and awareness.

By DES EKIN

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The key to preventing the spread of AIDS is education and awareness.
Do you know how to avoid catching AIDS?

AIDS is a disease that can cause death, and it is important to know how to avoid catching it. Here are some tips:

1. Avoid having sex with someone who is infected.
2. Use condoms and limit the number of sexual partners.
3. Avoid sharing needles and equipment used for injecting drugs.
4. Avoid casual contact with blood or other body fluids.
5. Avoid visiting countries with high AIDS rates.

Epidemic fears

Most Irish people fear that AIDS will become an epidemic, and they believe that the government should do more to warn people about the dangers of AIDS. These fears are supported by the results of a survey published in the Sunday World.

Among the measures that people want are:

- Increased public awareness campaigns
- More information on the symptoms of AIDS
- Increased funding for research into AIDS
- More education about safer sex practices
- Increased support for people living with AIDS

Facts

- In 1987, the number of AIDS cases in Ireland was relatively low.
- Most cases were among men who had sex with men.
- Public health officials advise that the best way to avoid catching AIDS is to avoid risky behaviors.
NOBODY DOES IT BETTER

Patrick Hennessy,
Sallynoggin Road,
Dun Laoghaire,
MAY I congratulate your paper on its comprehensive reporting on the scourge of the frightening disease — AIDS.

I would agree with those who believe television ads should be discreetly explicit about the dangers of spreading AIDS. It is important that schoolchildren should be educated on sexual matters.

However, adults also need immediate education and TV adverts seem the best method. Consistent reminders are sure to keep people aware of whatever precautions are best to curtail the plague. The SUNDAY WORLD has done its best — can anybody do it better?