

# Scientific discovery reveals structural flaw in AZT

NEW YORK (AP) — Ten years after AZT hit the market, scientists say they've figured out why it does not work better: Chemically, it's a bad dance partner. The discovery might lead to better weapons against the AIDS virus, the researchers said. But the company that makes AZT was skeptical.

AZT, the first drug approved for attacking HIV, sabotages the virus's attempts to reproduce itself. It does not work perfectly, and HIV eventually spawns mutant strains that resist the medication.

Many more anti-HIV drugs have come along since AZT, but the drug is still widely used.

The new research studied what happens to AZT once it gets into a person's body.

An AZT molecule goes through an intricate dance in a user's cells. It has to be modified three times to become effective against HIV, and to get that done, it has to dance with three different molecular partners. These partners are enzyme molecules that latch onto AZT one at a time, make a modification, and then let go.

The dance goes fine with the first partner. The problem comes with the second. When this enzyme and the AZT molecule pair up, the enzyme is far less efficient at making the crucial modification than it should be.

This creates a bottleneck in the process, reducing the amount of activated AZT that can be built up to

work on the AIDS virus.

What's the problem? The AZT molecule is basically stepping on the second partner's toes, German scientists report in the August issues of *Nature Medicine* and *Nature Structural Biology*.

More precisely, the enzyme molecule has a loop-like structure that's important in making the modification, and the AZT molecule has a protruding finger that bends this loop out of kilter. That makes it harder for the enzyme to act, the researchers concluded.

So scientists might do well to design drugs that avoid bending this loop, they said. Or they could provide AZT with a new dance partner that's more cooperative.

That would involve giving patients a gene to make their cells pump out an altered form of the enzyme, one that isn't hindered by AZT's protruding finger, they said.

Ramona Jones, a spokeswoman for AZT maker Glaxo Wellcome Inc., said the new work offers a better explanation for the processing glitch than scientists had before.

"We don't think this one piece of information is going to really change drug development that much," she said.

"But certainly any information added to the mix is helpful."

## Stalling the AIDS virus

### AZT (transcriptase inhibitors)

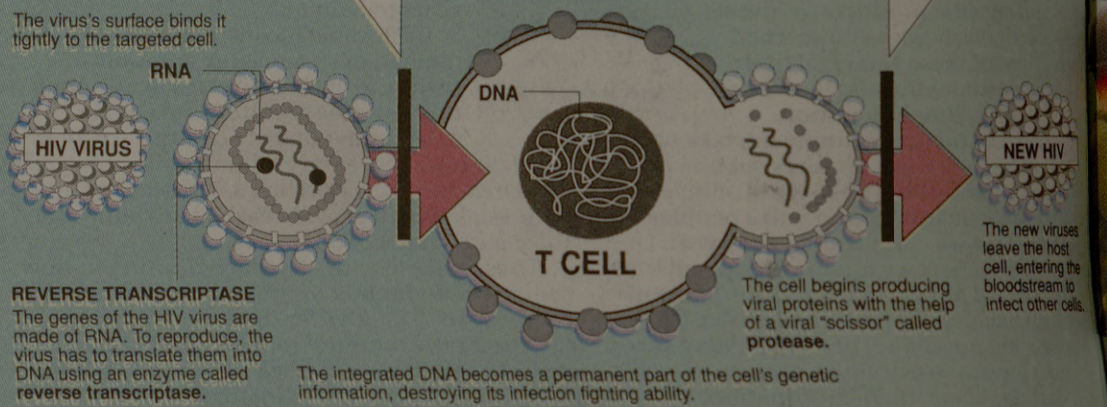
Inhibits virus production until the HIV becomes immune to it, often nine to 12 months. Then similar drugs such as ddI, ddC and 3TC can be used.

**How it works** The AZT molecule has to be modified in turn by three different enzyme molecules in the user's cells.

**The problem** Scientists have found that the shape of the second enzyme interferes with the effectiveness of the AZT molecule.

The HIV virus splices its own genes into those of the cell, turning it into a virus factory. Drugs can inhibit the process at two crucial points.

**SAQUINAVIR (protease inhibitors)** Cripples the protease enzyme, which is vital to the late stages of reproduction of the HIV virus.



Source: AP research

## Pol Pot video revives memories for Cambodians

PHNOM PENH, Cambodia (AP) — Huddled shoulder to shoulder, some on tiptoes, market vendors, shoppers and taxi drivers crowded around the TV monitor to look at the man blamed for the deaths of as many as two million Cambodians.

Boys and girls stood open-mouthed, eyeing the feeble, white-haired man — a bogeyman from horror stories suddenly become real.

Those old enough to remember him cried out in amazement: "That's him! That's him!"

The footage of toppled Khmer Rouge chief Pol Pot, obtained by a cameraman with American journalist Nate Thayer, was broadcast Tuesday on TV monitors in Phnom Penh's central market and at the historic temple, Wat Phnom.

ABC, which purchased the film, set up the monitors for its "Nightline" show to see how ordinary Cambodians reacted to their first sight of the secretive guerrilla Pol Pot in 18 years. The footage showed

a humiliated, broken Pol Pot being tried by his former Khmer Rouge comrades Friday and sentenced to house arrest for life.

Pol Pot and the Khmer Rouge ruled Cambodia from '75-'79, killing hundreds of thousands of people by starvation, overwork and systematic execution in a quest to transform the nation into a Marxist agrarian utopia. Invading Vietnamese forces eventually ousted Pol Pot, sending him and his followers into the jungles to continue their guerrilla war.

Most passers-by ignored the show Tuesday, inured to the 69-year-old guerrilla leader by years of conflicting rumors about his whereabouts and even his death and more worried about survival in a country still suffering from his reign of terror.

The emotions of those who did stop ranged from surprise to desire for a real trial, rather than the spectacle the Khmer Rouge held to publicly dis-

tance themselves from their longtime chief.

"I hate him. I wish they would just kill him," declared a taxi driver, who identified himself only as Savoeun.

Hem Savi, 41, watched recalled awakening from a Khmer Rouge interrogation session two decades ago to find that her parents and six siblings had been killed and thrown into a pit.

"I feel no pity for Pol Pot watching this," she said.

Ke Chandara, 35, a motorcycle taxi driver, said he was surprised anyone — even the Khmer Rouge — could catch and try Pol Pot, a nightmare figure of magical stature to most Cambodians.

Ke Chandara, who said his father's fingernails were torn out by the Khmer Rouge, agreed with others that the trial and punishment were not legitimate and that Pol Pot should be tried by a U.N. tribunal.

"There's no nation on earth that killed its people in such a cruel way as Pol Pot," said Ke Chandara.

## Palestinian panel urges dismissal of Arafat Cabinet

RAMALLAH, West Bank (AP) — A Palestinian legislative panel reported wide-ranging corruption Tuesday in all 18 Palestinian ministries — including diversion of foreign aid donations — and urged Yasser Arafat to sack his entire cabinet.

Arafat spokesman Marwan Kanafani praised the report and said it provides "a strong basis" for a cabinet reshuffle that Arafat was already planning. Yet lawmakers and some members of Arafat's own administration faulted the panel for failing to examine Arafat's role in any wrongdoing.

"The mismanagement starts from the top — way up on top," declared Husam Khader, a legislator from Nablus.

The investigating committee was formed in response to a state comptroller's report that found \$326 million of the Palestinian autonomy government's \$800 million annual budget had been squandered through corruption or mismanagement.

While the legislative committee has no legal authority, the report put Arafat on the spot — compelling him to either repudiate his political allies or face rising public anger over financial abuses.

The committee's report blamed the cabinet for allegedly failing to follow up reports of mismanagement and urged Arafat to "dissolve the entire cabinet" and replace it with one "made up of technocrats and qualified people."

It recommended bringing three ministers to trial, including Nabil Shaath, the chief Palestinian negotiator who was accused of charging his home phone and electric bills to the government.

Among allegations in the panel's 60-page report, read aloud Tuesday to the Palestinian Legislative Council:

- Information and Culture Minister Yasser Abed Rabbo used \$7,500 from the ministry budget to pay for central heating at his house.
- Transportation Minister Ali Qawasmeh accepted bribes for license cars that did not meet road standards.
- Civil Affairs Minister Jamal Tarifi gave illegal exemptions from customs duties for more than 4,300 cars — including a Jaguar for his father.

## Addicts praise Swiss heroin subsidy

ZURICH, Switzerland (AP) — Marco, a soft-spoken 30-year-old, has been hooked on heroin nearly half his life. Finally, he wants to quit. The courage he needs to try to start over comes from a familiar source: Heroin.

Three times a day, Marco enters a nondescript Zurich office building. He picks up a syringe, needle and swabs and sits in one of five office chairs. He shoots up.

As the drug courses into his bloodstream, a medical doctor stands by. Marco's drug supplier is none other than the Swiss government.

Marco is one of about 1,000 junkies in a state-run program that prescribes heroin to hard-core addicts in hopes of guiding them back into mainstream society — and encouraging them to kick their deadly habit.

The three-year experiment, while controversial, has rendered impressive results.

Nearly 90 of the addicts have entered programs to help them fully withdraw from the drug, although it's too soon to judge the success of their efforts. What is perhaps even more substantial are the side effects for the junkies: lower rates of AIDS and other infectious diseases and a dramatic drop in crime — saving the taxpayers money.

"The crime situation is much better, and the program's cheap," says Urs Vontobel, director of Crossline, one of 17 drug centers across Switzerland.

"And — above all — it works."

Marco and about 40 other addicts treated by Crossline each pay \$10 for a day's supply of heroin.

## Charter bus crashes into river

### Man chaperoning children's group dies

STONY CREEK, Va. (AP) — A bus taking children on a black history tour plunged off Interstate 95 into a river Tuesday, killing a chaperone regarded as a grandson to civil rights pioneer Rosa Parks. The 34 others aboard were injured.

The bus, part of a Pathways to Freedom tour co-sponsored by Parks' civil rights foundation, went off the road near this southern Virginia town and hurtled down an embankment, through trees and into the 5-foot-deep Notaway River.

Most of the injured were treated at hospitals and released, but four were seriously hurt, including the bus driver and a 16-year-old girl who broke both ankles.

The driver, Don Toliver of Detroit, had a hand and a foot amputated, said Gregory Reed, an attorney for Parks.

Most of the passengers were able to scramble out, though rescuers had to pull out three or four people trapped in the bus, which tipped over on its side in the water. The bus was carrying 29 youngsters, the driver and five chaperones.

The cause of the crash was not immediately known.

"Everyone was strong. Everyone was helping," said Patricia Ellis, 56, of Oxford, Ohio, a chaperone. "The young people did not cry out or yell. We are a family. We all have pain because we lost a member of our family."

Killed was 25-year-old Adisa Foluke of Detroit, whose mother, Anita Peek, is the director of the Pathways to Freedom program. His aunt, Elaine Steele, is the director of Parks' foundation. Peek and Steele are sisters.

"He was just as close to me as if he was my own grandson, and I felt that way about him, and that's how he felt about me," Parks, 84, said in Detroit as she waited for a flight to Virginia. "I'm just hoping, though, that the young people who survive will continue on with the program."

Some said they would.

"I have to now. I have to finish," said Makia Gibson, 18. "Until we cross the river into Toronto, Canada, our program says that we are not free. We have to press on for our freedom."

Freedom riders during the civil rights movement had problems as well, said Nicole Houston, 14, of Denver. "There were people that did die and they had to move on with it," she said.

The students, ages 11 through 18, came from around the country to take part in a tour that began three weeks ago in Charleston, S.C., to trace the route of escaped slaves and stop in places important to the civil rights movement. The tour planned to visit 22 cities in 15 states and Canada before ending Aug. 13 in Washington.

Parks had met with the students last week in Montgomery, Ala., and had planned to join the tour in Toronto, said Reed, her attorney.

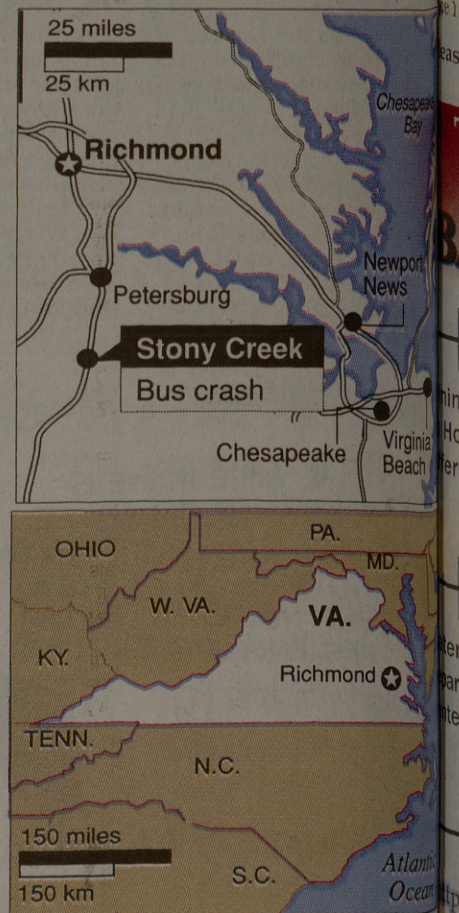
The tour was sponsored by the U.S. Transportation Department, the Detroit-based Rosa & Raymond Parks Institute for Self Development, and Shoney's restaurants, which in 1992 paid its black workers and former employees \$105 million to settle a race discrimination lawsuit alleging black applicants were turned away and black employees consigned to kitchen chores.

Parks galvanized the civil rights cause in 1955 when she refused to give up her seat on a Montgomery, Ala., bus to a white passenger, as required by law. That touched off a yearlong boycott of Montgomery buses that lifted the Rev. Martin Luther King Jr. to national prominence.

At the crash site, straight tracks on the grassy shoulder showed no evidence the driver hit the brakes. A red-and-white teddy bear hung out a window. Shirts, socks and two bus seats floated inside the bus.

Wilbert Mickens, 46, said he and most of the group were sleeping when he heard the bus crashing through trees and windows breaking.

"For a man that can't swim, it was terrifying, but we didn't worry about that," he said. "We just pulled them (the kids) out."



One of the most seriously injured was a 16-year-old girl who broke both ankles.

"We're sorry it happened, and we're trying to get to the bottom of what happened," said Gregory Reed, an attorney for the Rite-Way Chartered of Detroit, which operated the bus. "Sometimes, these things happen."

**TRY THESE TASTE-TEMPING**

**DINING & FOOD SPECIALS**

---

**Italian Sub**  
(11-2 daily)

Imported ham, cheese, salami, and pepperoni on a fresh baked bun. Loaded with lettuce, tomato, and our special Italian sauce. Served with chips or pasta salad and a pickle. Price includes a 16 oz. soft drink.

**\$2.73 + tax**

Expires 12/97



**COLDEST BEER**  
**COLLEGE STATION, TX**  
311 University Drive • 846-3030

---

**Koko Pili's**

FINE SOUTHWESTERN FOOD

**JULY DELIVERY SPECIAL**

Delivery Daily: 11:00 - 1:00  
5:00 - 9:00

**2 Pizzas & 2 Soft Drinks \$11.95**

Choose from any of our wood-fired pizzas.

**764-8717**  
1905 Texas Ave., South

---

**LONG JOHN SILVER'S**

ALL you can eat Fish or Chicken.  
**\$3.99**  
Sun. thru Weds. (all day long)

8081 Texas Ave. College Station and 3224 S. Texas Ave. Bryan

We accept checks.

**POPCORN Munchers**  
**\$1.79**