

Original Spin Interview

Kary Mullis by Celia Farber 1994

Interview with Kary Mullis by [Celia Farber](#)

Spin magazine
July 1994



Kary Mullis, winner of the 1993 Nobel Prize in Chemistry, has rocked the world of science with his party-boy surfer demeanor. Now he's ready to take on the AIDS establishment. Celia Farber talks to the rebel genius.



[Kary Mullis](#)

The first time I interviewed Kary Mullis was in 1991, in the bar of a hotel somewhere in New Jersey while a blizzard raged outside. His demeanor surprised me. Here was a man responsible for one of the greatest scientific inventions of the century – the mass duplication of DNA – and he swaggered in wearing jeans, cracking jokes in a sharp southern accent, ordering drinks, and behaving overall like a regular person. He utterly lacked that sterile, statesmanlike aura that usually looms over Men of Science.

Instead, Mullis, who has been described in the press as possessing a "creative nonconformity that verges on the lunatic," struck me as a person with a pure and insatiable curiosity. He had as many questions for me as I had for him. For instance, by the end of the interview, I recall him asking me to articulate why it would matter if I were to discover that the hotel lobby, the bar, the bartender, the drinks, and our conversation had all been an electronic mirage.

Mullis's invention of the polymerase chain reaction (PCR) won him the Nobel Prize in Chemistry in 1993. PCR is a remarkably simply yet revolutionary method of selectively multiplying and mass-producing specific DNA segments in just hours. Previously, DNA could be multiplied, but not isolated, and it is in the isolation that the revolutionary kernel lies. Scientists can now undertake everything from detecting hereditary cancers in fetuses, to solving impossible murder mysteries, to retracing

the very depths of evolution. The *London Observer* trumpeted: "Not since James Watt walked across Glasgow Green in 1765 and realized that the secondary steam condenser would transform steam power, an inspiration that set loose the industrial revolution, has a single, momentous idea been so well recorded in time and place."

Now there can be precise biological vision where there used to be darkness. Speculation can crystalize into fact, and lives are already being changed by the PCR machine, now a staple of every biology laboratory. An American soldier killed in Vietnam, for instance, was identified after more than a generation by matching the DNA in a lock of his baby hair to a single bone found on the battlefield. A man who had served nine years in prison for rape and murder he did not commit was released thanks to a PCR test on a dried speck of semen taken from the crime scene. President Lincoln's suspected genetic disease, Marfan's syndrome, can finally be diagnosed based on his stored bone fragments. The FBI expects that PCR will one day make it possible to identify extortionists by the DNA from their saliva left on the flap of an envelope, and even ancient DNA from dinosaurs can be resurrected and studied. In fact, PCR was the conceptual root of Michael Crichton's blockbuster novel *Jurassic Park*.

PCR has also had a great impact on the field of AIDS, or rather, HIV research. PCR can, among other things, detect HIV in people who test negative to the HIV antibody test.

The word "eccentric" seems to come up often in connection with Mullis' name: His first published scientific paper, in the premier scientific journal *Nature* in 1986, described how he viewed the universe while on LSD – pocked with black holes containing antimatter, for which time runs backward. He has been known to show photographs of nude girlfriends during his lectures, their bodies traced with Mandelbrot fractal patterns. And as a side project, he is developing a company which sells lockets containing the DNA of rock stars. But it is his views on AIDS that have really set the scientific establishment fuming.

Mullis, like his friend and colleague Dr. Peter Duesberg, does not believe that AIDS is caused by the retrovirus HIV. He is a long-standing member of the Group for the Reappraisal of the HIV-AIDS Hypothesis, the 500-member protest organization pushing for a re-examination of the cause of AIDS.

One of Duesberg's strongest arguments in the debate has been that the HIV virus is barely detectable in people who suffer from AIDS. Ironically, when PCR was applied to HIV research, around 1989, researchers claimed to have put this complaint to rest. Using the new technology, they were suddenly able to see viral particles in the quantities they couldn't see before. Scientific articles poured forth stating that HIV was now 100 times more prevalent than was previously thought. But Mullis himself was unimpressed. "PCR made it easier to see that certain people are infected with HIV," he told *Spin* in 1992, "and some of those people came down with symptoms of AIDS. But that doesn't begin even to answer the question, 'Does HIV cause it?'"

Mullis then went on to echo one of Duesberg's most controversial claims. "Human beings are full of retroviruses," he said, "We don't know if it is hundreds or thousands or hundreds of thousands. We've only recently started to look for them. But they've never killed anybody before. People have always survived retroviruses."

Mullis challenged the popular wisdom that the disease-causing mechanisms of HIV are simply too "mysterious" to comprehend. "The mystery of that damn virus," he said at the time, "has been generated by the \$2 billion a year they spend on it. You take any other virus, and you spend \$2 billion, and you can make up some great mysteries about it too."

Like so many great scientific discoveries, the ideas for PCR came suddenly, as if by direct transmission from another realm. It was during a late-night drive in 1984, the same year, ironically, that HIV was announced to be the "probable" cause of AIDS.

"I was just driving and thinking about ideas and suddenly I saw it," Mullis recalls. "I saw the polymerase chain reaction as clear as if it were up on a blackboard in my head, so I pulled over and started scribbling." A chemist friend of his was asleep in the car, and, as Mullis described in a recent

special edition of *Scientific American*: "Jennifer objected groggily to the delay and the light, but I exclaimed I had discovered something fantastic. Unimpressed, she went back to sleep."

Mullis kept scribbling calculations, tight there in the car, until the formula for DNA amplification was complete. The calculation was based on the concept of "reiterative exponential growth processes," which Mullis had picked up from working with computer programs. After much table-pounding, he convinced the small California biotech company he was working for, Cetus, that he was on to something. Good thing they finally listened: They sold the patent for PCR to Hoffman-LaRoche for the staggering \$300 million – the most money ever paid for a patent. Mullis meanwhile received a \$10,000 bonus.

Mullis's mother reports that as a child, her lively son got into all kinds of trouble – shutting down the house's electricity, building rockets, and blasting small frogs hundreds of feet into the air. These days, he likes to surf, rollerblade, take pictures, party with his friends – most of whom are not scientists – and above all, he loves to write.

Mullis is notoriously difficult to track down and interview. I had left several messages on his answering machine at home, but had gotten no response. Finally, I called him in the late evening and he picked up, in the middle of bidding farewell to some dinner guests. He insisted he would not give me an interview, but after a while, a conversation was underway, and I asked if I couldn't just please turn my tape recorder on. "Oh what the hell," he gruffed. "Turn the fucker on."

Our talk focused on AIDS. Though Mullis has not been particularly vocal about his HIV skepticism, his convictions have not, to his credit, been muddled or softened by his recent success and mainstream acceptability. He seems to revel in his newly acquired power. "They can't pooh-pooh me now, because of who I am," he says with a chuckle – and by all accounts, he's using that power effectively.

When ABC's "Nightline" approached Mullis about participating in a documentary on himself, he instead urged them to focus their attention on the HIV debate. "That's a much more important story," he told the producers, who up to that point had never acknowledged the controversy. In the end, "Nightline" ran a two-part series, the first on Kary Mullis, the second on the HIV debate. Mullis was hired by ABC for a two-week period, to act as their scientific consultant and direct them to sources.

The show was superb, and represented a historic turning point, possibly even the end of the seven-year media blackout on the HIV debate. But it still didn't fulfill Mullis' ultimate fantasy. "What ABC needs to do," says Mullis, "is talk to [Chairman of the National Institutes of Allergy and Infectious Diseases (NIAID) Dr. Anthony] Fauci and [Dr. Robert] Gallo [one of the discoverers of HIV] and show that they're assholes, which I could do in ten minutes."

But, I point out, Gallo will refuse to discuss the HIV debate, just as he's always done.

"I know he will," Mullis shoots back, anger rising in his voice. "But you know what? I would be willing to chase the little bastard from his car to his office and say, 'This is Kary Mullis trying to ask you a goddamn simple question,' and let the cameras follow. If people think I'm a crazy person, that's okay. But here's a Nobel Prize-winner trying to ask a simple question from those who spent \$22 billion and killed 100,000 people. It has to be on TV. It's a visual thing. I'm not unwilling to do something like that."

He pauses, then continues. "And I don't care about making an ass of myself because most people realize I am one."

While many people, even within the ranks of the HIV dissidents, have of late tried to distance themselves from the controversial Duesberg, Mullis defends him passionately and seems genuinely concerned about his fate. "I was trying to stress this point to the ABC people" he says, "that Peter has been abused seriously by the scientific establishment, to the point where he can't even do any research. Not only that, but his whole life is pretty much in disarray because of this, and it is only because he has refused to compromise his scientific moral standards. There ought to be some

goddamn private foundation in the country, that would say, 'Well, we'll move in where the NIH [National Institutes of Health] dropped off. We'll take care of it. You just keep right on saying what you're saying, Peter. We think you're an asshole, and we think you are wrong, but you're the only dissenter, and we need one, because it's science, it's not religion.' And that was one of the reasons why I cooperated with ABC."

"I am waiting to be convinced that we're wrong," Mullis continues. "I know it ain't going to happen. But if it does, I will tell you this much – I will be the first person to admit it. A lot of people studying this disease are looking for the clever little pathways they can piece together, that will show how this works. Like, 'What if this molecule was produced by this one and then this one by this one, and then what if this one and that one induce this one' – that stuff becomes, after two molecules, conjecture of the rankest kind. People who sit there and talk about it don't realize that molecules themselves are somewhat hypothetical, and that their interactions are more so, and that the biological reactions are even more so. You don't need to look that far. You don't discover the cause of something like AIDS by dealing with incredibly obscure things. You just look at what the hell is going on. Well, here's a bunch of people that are practising a new set of behavioural norms. Apparently, it didn't work because a lot of them got sick. That's the conclusion. You don't necessarily know why it happened. But you start there."

Mullis points out that transportation and sheer population growth have greatly increased the number of other human beings a person is likely to come into contact with during the course of a lifetime, and argues that "bathhouse cultures of some metropolitan gay communities" enabled an unprecedented exchange of infectious viruses. Such a viral overload, Mullis suggests, may trigger an immune chain reaction that could destabilize or debilitate immune function. Transfusion of blood from one such highly infected individual, he argues further, could transfer enough viruses to cause immune dysfunction in the recipient. He disagrees with Duesberg's idea that AIDS is a toxicological syndrome, but says that he feels both of their theories "ought to be tested at least."

He is aware that this view of AIDS – one that encompasses each person's history or "lifestyle" – is rejected by virtually all AIDS organizations, researchers, and activists, who consider it "blaming the victim." "It's not blaming the victim," Mullis argues. "It's not anybody's fault. They just did something that didn't work, that's all."

Commenting on the hostility with which these ideas are met, Mullis says, "People don't want to hear from somebody like me who's not a member of their society. They say to me, 'You don't know shit about this, Mullis.' People say to me, 'How many people have you seen die of this disease?' They say, 'You don't know what causes it because you've never watched them die.'"

I ask Mullis why he ever became involved in this debate, particularly since he's an independent scientist, with no financial or professional stake in either point of view.

"I was driving one night," Mullis explains, "must have been around 1987, from Berkeley down to La Jolla, and I was trying to stay awake. I turned on public radio and there was Peter Duesberg. I knew who he was and I knew there was some controversy about him but I didn't know any details. And I just listened. And I said this man is pretty damn intelligent."

Mullis invited Duesberg to speak at the chemistry conference he was organizing. "At first the audience was ready to jeer him," Mullis recalls. "The questions at first were kind of like 'you asshole.' By the time the two hours were up, everybody was totally convinced that he had a good case. After the animosity wears off – which takes longer as he becomes more of a martyr – people realize this man knows what the hell's going on and nobody else does. Afterward, everybody came to my house for a party. I've got beautiful pictures of Peter, swimming in the ocean without a wet suit." Mullis laughs, then falls silent.

Referring to the guardians of the HIV establishment, such as Gallo and Fauci, Mullis suddenly turns from rage to pity. "I feel sorry for 'em," he admits. "I want to have the story unveiled, but you know what? I'm just not the kick-'em-in-the-balls kind of guy. I'm a moral person, but I'm not a crusader. I

think it's a terrible tragedy that it's happened. There are some terrible motivations of humans involved in this, and Gallo and Fauci have got to be some of the worst."

Then the anger kicks in again. "Personally, I want to see those fuckers pay for it a little bit. I want to see them lose their position. I want to see their goddamn children have to go to junior college. I mean, who do we care about? Do we care about these people that are HIV-positive whose lives have been ruined? Those are the people I'm the most concerned about. Every night I think about this. I think, what is my interest in this? Why do I care? I don't know anybody dying of it. They're right about that. Well, except one of my girlfriend's brothers died of it, and I think he died of AZT."

At this point, Mullis voice starts to crack. "The horror of it is every goddamn thing you look at, if you look at it through the glasses that you've developed through looking at this thing, seems pretty scary to me. Look at the oncogene people and I go, oh yeah, I know what they are doing. Same stuff. Oncogenes don't have anything to do with cancer. Radiation probably doesn't have anything to do with stopping cancer. The drugs that we use on people – all those goddamn horrible poisons – they're no less toxic than AZT. And we are doing it to everybody. Everybody's aunt is being radiated once a goddamn month and given drugs that are going to kill her. We're dealing with a bunch of witch doctors. The whole medical profession – except for the people that patch you up when you get a broken leg or you have a plumbing problem – is really fucked. It's just a bunch of people that have become socially important and very rich by thinking about the fact that they might be able to cure the diseases that actually cause people in our society to die. And they can't do shit about it. It's scary, that's what it is."

He takes a deep breath, and I realize that on the other end of the phone, Kary Mullis, Nobel laureate, pioneer of the DNA revolution, has started to cry. "God, I hate this kind of crap. I really don't want to write about it. I'd like to write about something that's easy to write about, where you don't have to come up with a conclusion in the end. I've been writing about my boyhood, when I was a little kid back on my grandfather's farm where we didn't know about black widow spiders or all that stuff. But writing about that is so easy. Sometimes in the morning, when it's a good surf, I go out there, and I don't feel like it's a bad world. I think it's a good world, the sun is shining. I'm really optimistic in the mornings. But, you know, it's not because of you calling me. It's just thinking about this issue, it just drives me to – I'm making tears thinking about it. I don't see how to deal with it. I can't possibly write a book that will describe it to somebody. You can't do a damn 22.8-minute TV thing that is going to have any effect except to get somebody to shoot through my window and hit me. I feel like I'm on a hostile planet."

At a recent community forum meeting in New York, a leading AIDS activist, when asked about whether Mullis shouldn't be taken seriously, answered that he should not, for he is a "sexist pig." This was based on something Mullis allegedly said upon receiving the Nobel prize – that the prize would be "a great way to pick up babes." I present Mullis with this logic.

He sounds genuinely confused, pointing out that his various women friends all tell him that he's the only one they deal with who really loves women. "They just want to show that I'm not politically correct," he says. "Well I'm not. And the reason is that I already got my money from the Swedes, right? I'm done, I'm fixed. I'm a free agent, and it is the most wonderful feeling. There is nobody on the planet that can fuck with me. And I can say exactly what I feel about any issue and I'm going to do that. A lot of people are not going to like it, but a lot of people are going to say, 'Well, that's really cool that you said that.' And I'm not really going to care about the people who don't like it."

© 1994 by [Celia Farber](#)

Originally published in *Spin* magazine

Questions? email – davesheers@gmail.com

Videos (on BitChute) - aligning with documents – search “davesheers”