# **Nobel Denial?**

Several denialist websites proclaim that two—even three—Nobel Prize winners question HIV as the cause of AIDS. Is this true? AIDS Truth investigates...

A recent News Feature in the journal *Nature* explores the advocacy work of several Nobel Prize winners (Volume 447, 24 May 2007, pp. 374-5; the article and an accompanying editorial are available on the *Nature* website). The piece finds some of these activities entirely admirable, others less so. In any case, attaching the allure of the Nobel Prize to a particular cause cannot help but have an impact. As *Nature* quotes Physics laureate Philip Anderson, there is little reason to think "a sports figure would know more about famine or any other issue"...but a Nobel Prize winner makes a more impressive spokesperson. A Nobel laureate could, at least potentially, be an expert on anything: if a person is "smart" enough to win the Nobel in a highly specialized field, goes the reasoning, his or her views on issues in the wider world should carry extra weight. This reasoning is fallacious, of course; science is highly specialized, and the polymath is a creature of the past. Reputable AIDS researchers, whether Nobelists or not, would not dream of commenting on complex issues in the physics world, where they would lack credibility. Even within a discipline such as biology, knowledge is increasingly compartmentalized, prompting the wise scientist to tackle only those topics on which he or she is a genuine expert. Unfortunately, AIDS denialists with experience in science routinely parade their lack of judgment and credibility by pontificating on subjects of which they have little or no direct knowledge. See the opinion of Judge Sulan in a 2007 ruling, stating that the denialist "Perth Group" had no qualifications to offer "expert testimony" (decision, AIDS Truth commentary, news account) on HIV and AIDS in a trial in Adelaide, Australia. Indeed, by any sensible standards, there is not a single AIDS denialist scientist of any stature who could be considered a genuine expert on HIV/AIDS.

Furthermore, the award of a Nobel Prize does not mean that the laureate necessarily has sound judgment (although many recipients clearly do). Consider as just one example the case of William Shockley, who used his 1956 Physics Prize for transistor technology as a bully pulpit to advance the case for eugenics.

Nevertheless, to inflate their appeal (or to reassure themselves), HIV/AIDS denialists confidently state that several Nobelists support their claims. Unfortunately, with one (very exceptional) exception, they are wrong. Since denialist websites usually fail to cite their sources, a fair amount of sleuthing is required to figure out exactly whom denialists consider to be the two or "three Nobel Prize winners" who say HIV does not cause AIDS. From any angle, only a few Nobel laureates could qualify as HIV/AIDS "rethinkers" even in the characteristically overactive denialist imagination. We highlight several of these below.

#### Wangari Maathai

2004 Nobel Peace Prize winner Wangari Maathai is hardly an expert on the science of HIV and AIDS. Nevertheless, a single careless statement is often enough to earn one the eternal and dubious friendship of the HIV/AIDS denialists. Maathai reportedly made such a statement at a press conference following the announcement of her Nobel Prize. She referred to HIV as the product of a weapons lab, implying that race politics underlay its "development." To her great credit, Maathai later retracted her words and explained her thoughts on the matter in her 2006 memoirs (*Unbowed*, Knopf). She states unequivocally that she does not actually believe what she had said, and that HIV is not a weapon of racial extermination. To record Maathai as a denialist is to ignore Maathai's own words.

## **Linus Pauling**

With two Nobel Prizes to his credit (Chemistry, 1954, and Peace, 1962), Linus Pauling (1901-94) would certainly have added some much-needed credibility to the denialist ranks. Pauling's reputation for brilliance and his later pursuit of Vitamin C as a cure-all—earning him raised eyebrows and even outright disapprobation from his colleagues—would also have positioned him well amongst some similarly quirky, if less-accomplished, denialists. Unfortunately for the HIV/AIDS deniers, Pauling's views on the subject are well documented. Pauling was by no means a denialist.

Linus Pauling acknowledged the existence of HIV, he recognized it as the causative agent of AIDS, and he considered AIDS to be a substantial health problem [see this interview for one presentation of his views]. As a result, Pauling devoted extensive effort in his last years of research to helping, in his own unique way, in the struggle against HIV and AIDS. Pauling viewed Vitamin C as a potential agent against HIV...in addition to AZT and other drugs (Pauling died before triple therapy was available). He also felt that massive doses of Vitamin C could improve the health of AIDS patients. While Pauling was wrong about the extent of Vitamin C's benefits, no doctor would object to improved nutrition in any patient. Pauling's efforts were well intended, and, unlike at least one of his minor disciples, he did not propose his vitamin

theory as an alternative to more orthodox (and effective) antiviral therapies. Those who consider Pauling a denialist are playing fast and loose with the facts.

Sadly, even thirteen years after Linus Pauling's death, several denialist internet petitions still list him as a professed and active denialist. Of course, perhaps we should expect this kind of gross disrespect and distortion from those who apparently care so little for the lives of HIV and AIDS patients, and who pervert the truth so cavalierly.

#### Walter Gilbert

Many in the scientific community were distressed in the late 1980s when Walter Gilbert, a respected scientist by all accounts, voiced concerns about the rigor of HIV science. Following Peter Duesberg's curious interpretation of "Koch's Postulates," Gilbert questioned whether HIV truly had been proven to be the sole cause of AIDS. He also found fault with what he perceived to be the unfair treatment of Duesberg and other HIV/AIDS "dissidents." Because of these positions, Walter Gilbert has long been named by the denialist community as one of "its" Nobelists. But if Walter Gilbert was ever a denialist, does he remain so today?

Apparently not: <u>correspondence</u> between Walter Gilbert and Richard Jefferys was published on the Internet in 2006, demonstrating that, whatever Gilbert once thought about HIV, he now recognizes the virus as the cause of AIDS. The effectiveness of antiviral drugs, Gilbert explains, satisfied any lingering doubts he had. Nevertheless, denialists continue to consider Gilbert one of their own. Like so many who have recanted their positions on this issue, Walter Gilbert remains on the denialist internet petitions, demonstrating how quick denialists are to abuse the scientific credentials of others—but how slow to respect the scientists (and science) behind them, how unwilling to print the truth.

## **Kary Mullis**

The 1993 Nobel Prize winner in Chemistry was once at unease on his rural retreat in California. Something had frightened him in the woods, and he concluded (surely, as any reasonable person would), that he had been abducted by aliens. To overcome his fear, Mullis loaded his AR-15 (the semi-automatic civilian version of the military M-16), headed into the night, and, imagining John Wayne beside him, proceeded to empty clip after clip of ammunition at anything "dark" in the forest.

This shoot-from-the-hip, devil-may-care, "the facts are what I think they are" attitude underlies Mullis' approach to life in general, at least as reflected by the many examples in his autobiographical sketch collection, *Dancing Naked in the Mind Field* (reviewed <a href="here">here</a> by Robert Funkhouser). In the lab, Mullis kept his beer in the radiation refrigerator, scoffing at safety regulations. He disputes that humankind can do anything to harm the environment. He believes in alien abductions; that he was visited by a radiant raccoon ET; in astrology; in telepathy; in "astral planes." He happily recalls synthesizing experimental psychedelic drugs—and trying them out on himself. "It takes all kinds," they say, and Mullis is in his own category. Colorful, creative, no doubt quite intelligent, he is many things...but not exactly a reliable guide to scientific facts and clear thinking, as the above examples show.

Mullis is indisputably a denialist of HIV and AIDS, devoting two chapters in his autobiography to the subject; interestingly, he arrived at his stance in the same haphazard manner that led him to "treat" his fear of aliens by furiously firing a rifle at who-knows-what. Mullis once asked some colleagues for "the" reference on HIV as the cause of AIDS, apparently unaware that few, if any, diseases are "solved" in a single paper. Decades of research, described in thousands of articles, often go into determining the cause of a disease. Responding, several scientists pledged to send Mullis references on HIV and AIDS. According to Mullis' account, they failed to write him as promised. Just as Mullis explained his unease in the woods as an aftereffect of alien abduction, he curiously viewed his colleagues' silence not as forgetfulness or discourtesy, but as "proof" that HIV does not cause AIDS. Thus began the relationship between one Nobel Prize winner and HIV/AIDS denial, one that has most recently seen Mullis joining a biotechnology venture with fellow denialists Harvey Bialy, Peter Duesberg, and David Rasnick. (See also Aetiology's coverage; it is interesting to note that these denialists' willingness to interact with the biotechnology/pharmaceutical industry for personal profit contrasts starkly with HIV/AIDS denialists' condemnation of such associations in others.)

In a specific manifestation of denialism, Kary Mullis has, at least in the past, disputed the use of a type of polymerase chain reaction—real-time PCR—to quantitate HIV. Since Mullis was awarded the Nobel for helping to develop the basic PCR technique, denialists see this as the final word on viral load measurements. But does Mullis' experience with PCR give him ultimate authority on subsequent derivations and applications of the technique? We could also ask, should the inventor of the brick have had a veto over any potential application of the material? Could that ancient inventor have said,

with no justification other than some creative history, "Those pyramids will be unstable," or "No, I don't think we should pave a road with bricks?" Of course not; those decisions would have been made by teams of what we now call engineers. And in HIV science, the applications of PCR are developed by researchers and clinicians, not by the alien abduction and LSD devotee who, fortunately, was in the right place at the right time at the inception of PCR.

Incidentally, it is not at all clear that Mullis still objects to the use of PCR to detect viral nucleic acids. In an exchange with HIV expert Peter McDonald in the context of the Adelaide trial of Chad Parenzee (an Australian HIV-positive man who was accused and convicted of knowingly endangering the lives of his sexual partners), Mullis wrote that PCR appears to work well and correctly observed that the validity of the technique is not dependent on his opinion, anyway. While this does not necessarily mean that Kary Mullis has entirely rejected HIV/AIDS denialism, it does suggest that denialists should be more careful when formulating his supposed pronouncements on the value of PCR.

In conclusion, apart from Kary Mullis—a dubious authority at best, and whose position seems to have changed over the years—no Nobelist denies that HIV causes AIDS. We encourage the various denialist groups to clean up their Internet petitions, better to mirror this truth. Perhaps after they delete the many names of those who have so tragically died of the very disease whose existence they disputed, these groups could show a similar respect for the Nobel Prize and its winners…by removing the names of Nobel laureates who do not practice HIV/AIDS denial.

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