

Denying AIDS

Seth C. Kalichman

Denying AIDS

Conspiracy Theories, Pseudoscience,
and Human Tragedy

Foreword by Nicoli Nattrass



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Visit the author's blog at <http://denyingaids.blogspot.com/>

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“What mattered to me as person living with HIV was to be told that HIV did not cause AIDS. That was nice. Of course, it was like printing money when the economy is not doing well. Or pissing in your pants when the weather is too cold. Comforting for a while but disastrous in the long run.”

*-Winstone Zulu, Zambian AIDS
Activist and former denialist*

Author Disclaimer of Potential Conspiracy Involvement



Seth C. Kalichman has never taken financial support from any pharmaceutical company, although he has accepted pens and key chains from Pfizer sales reps at conventions. He has also not applied for or received funding from the Bill and Melinda Gates foundation; however, this book was word processed in Microsoft Word. Kalichman is also a U2 fanatic and purchases Product (Red) whenever possible. When he is not working to understand AIDS denialism, Kalichman conducts HIV/AIDS prevention and treatment research in Atlanta and South Africa. His research is funded by the National Institutes of Health but he has never met nor communicated with Robert Gallo. Kalichman is a Professor of Psychology at the University of Connecticut and is therefore an employee of The State. He is the editor of the journal *AIDS and Behavior*, published by Springer Science & Business Media.

The author is donating all of his royalties from sales of this book to the Family Treatment Fund administered by Massachusetts General Hospital to purchase antiretroviral medications for people living with HIV/AIDS in Africa. Visit the Family Treatment Fund website at <http://www.shallwego.net/ftf/index.htm>.

Foreword



HIV causes AIDS. This is not a controversial claim but an established fact, based on more than 25 years of science. Yet a small group of AIDS denialists claims that HIV is harmless, and that the antiretroviral drugs used to fight it cause, rather than treat, AIDS. They believe that the pharmaceutical industry has somehow conspired with thousands of doctors and scientists, to invent a disease as a means of selling harmful drugs. Such talk sounds to most of us like lunacy. But the sad fact is that AIDS denialism has emerged as a genuine menace to global public health including in the United States and, particularly, in South Africa.

AIDS denialism gained such currency with former President Thabo Mbeki of South Africa that his administration was, until recently, reluctant to expand access to antiretroviral drugs. This delay cost thousands of lives and to this day only a third of those needing antiretrovirals actually receive them. This response is poor by the standards of middle-income countries, but it is especially troublesome in South Africa, which has more HIV-positive people than any other country.

American AIDS denialists are partly to blame for South Africa's unfortunate history of AIDS policy. Peter Duesberg, the leading AIDS denialist, and his small band of supporters was invited by Thabo Mbeki to serve on his presidential panel on AIDS. These denialists rejected all the evidence presented to them about the efficacy of using antiretrovirals for the prevention of mother to child transmission. This resulted in policy deadlock and further delayed the use of antiretrovirals either for prevention or treatment. Even after the panel had completed its work, the Health Minister, Manto Tshabalala-Msimang, continued to support AIDS denialists (even engaging one of them as an advisor), to promote unproven alternative nutritional remedies and to denigrate antiretrovirals as poison. Several prominent South Africans died of AIDS after opting to change their diets instead of taking antiretrovirals.

The health minister also failed to take steps against another AIDS denialist, Matthias Rath, for running illegal clinical trials in African townships in which AIDS patients were asked to go off antiretrovirals and onto vitamins instead. It was only after a protracted legal battle fought by the Treatment Action Campaign that these trials were recently declared illegal. In the past, South Africa's Medicines Control Council acted swiftly to curb such abuses but the power of this body was steadily eroded by the Health Minister. AIDS denialism now underpins a lucrative nutritional supplements industry that had the tacit, and sometimes active, support of the Mbeki administration.

By courting the AIDS denialists, President Mbeki has increased their stature in the United States. He lent credibility to Christine Maggiore, a Californian who campaigns against using antiretrovirals to prevent mother to child transmission, when he was photographed meeting her. Two years later, Ms. Maggiore gave birth to a daughter who tragically died at age 3 of what the coroner concluded was an AIDS-related infection. Mother-to-child transmission is now rare in the United States, thanks to the widespread use of preventive therapy and the activities of organizations like the National Institutes of Health and the Elizabeth Glaser Pediatric AIDS Foundation. Sadly, this is not so in South Africa, where many children are born infected and then face short, painful lives.

Until recently, AIDS researchers and activists in the United States tended to regard the denialists with derision, assuming they would fade away. Unfortunately, this has not happened. Journalists like Celia Farber continue to promote the denialist view and keep them in the public eye. More disturbingly, she and Duesberg received awards during "whistleblower week" in Washington during 2008. This indicates that AIDS denialists have not only been capable of convincing vulnerable AIDS patients to go off their medications, but have also managed to win over certain public opinion makers with their misrepresentations and erroneous point of view. There is a real risk that a new generation of Americans could be persuaded that HIV either does not exist or is harmless, that safe sex is not important and that they do not need to protect their children from this deadly virus. A resurgence of denialism in the United States would have far reaching effects on the global AIDS pandemic, just as it already has in South Africa.

Who are these AIDS denialists and what motivates them to pursue their deadly campaign? Seth Kalichman tackles this difficult topic here in this very useful, timely and insightful book. He provides an engaging portrait of the key AIDS denialists in the United States, showing that they are, at heart, "suspicious thinkers" prone to conspiracy theories and other wacky beliefs. This exposé is very important because all too often innocent people are lead to believe that there is a genuine "scientific debate" over AIDS. There is not. We know more about HIV and how it causes AIDS than we know about any

other pathogen. AIDS denialists promote the illusion of scientific debate. Seth Kalichman shatters that illusion by pointing to their erroneous forms of reasoning and unscientific approaches. Everyone should read this book.

Nicoli Nattrass
Cape Town, South Africa

Preface



My strange journey into HIV/AIDS denialism started with a seemingly random event. As the editor of the behavioral science research journal *AIDS and Behavior* I sent an email to everyone who had ever been asked to provide peer reviews for papers submitted to the journal requesting that they update their contact information. Psychologist Kelly Brennan-Jones at the State University of New York in Brockport replied to my email and said that she had no idea who I was, why I sent her the request, and asked me to remove her from the journal database. How she got my email was simply that I had asked her to review a paper some time back to which she had declined. As an expert in the study of relationships, I knew her work dating back to my years in graduate school. I knew Kelly Brennan-Jones was trained at a superlative university by some of the best social psychologists in the country. When I reminded her of the request to review for the journal and asked if she would consider reviewing in the future, she promptly directed me to an internet link telling me to read the information there if I was interested in knowing what she thought of AIDS. The link was to the David Crowe's Alberta Reappraising AIDS Society website which posted her August 2007 article "The HIV/AIDS Myth: A Review of [Peter] Duesberg's *Inventing the AIDS Virus*". My reaction was one of absolute outrage. I mean I was really angry. I was in an emotional upheaval. I surprised everyone around me, including myself, by my seemingly irrational reaction. How could someone I knew to be intelligent, well-trained as a scientist at a respectable university and in a position of influence over college students endorse a book that everyone surely knows is outdated, biased, and of little more value than that worthy of a doorstop?

Having dedicated my entire adult life to preventing the suffering caused by HIV/AIDS, I realize that HIV disease is very complex. People who test HIV positive as well as those who care for them will gladly grasp at the idea that HIV does not cause AIDS. Who wouldn't? Peter Duesberg, and all the denialists who have followed him, offers that very false hope. Repackaged by what has become a movement of denialism and propped up by a

pseudoscientific enterprise, the idea that HIV does not cause AIDS has floated around for nearly 20 years. It just does not go away. In fact, the movement grows stronger in every country that is suffering a significant AIDS problem. For some, like many of us in the United States, it is easy to ignore HIV/AIDS denialism because its followers are invisible to us. For others, like my friends in South Africa, it is impossible to ignore. People living with HIV/AIDS in every country are vulnerable to the confusion and disinformation propagated by a small group of denialists whether by their books, brochures, or Internet postings. Reading that HIV does not cause AIDS can dissuade people from getting tested for HIV, lead HIV infected people to ignore their HIV positive test result, and persuade some to reject antiretroviral therapies in place of vitamins and nutritional supplements. These are not hypothetical situations. Real people are facing a life threatening disease that can be effectively treated. Realizing that all AIDS scientists should take action to counter the claims of HIV/AIDS denialism, I decided to write this book.

To understand HIV/AIDS denialism, I had to start from scratch. Like nearly every AIDS scientist, I have ignored denialism. I suppose you could say I was in denial about denialism. I knew it was out there, but I pushed it to the back of my mind. To begin my journey into the world of HIV/AIDS denialism I dived into books, magazines, and most of all, the Internet to learn all angles. Still, it seemed insufficient. Getting to know the denialists not just their papers seemed essential. So I started corresponding, conversing, and visiting the insiders of HIV/AIDS denialism. I posed questions and gained insight into the inner workings of denialism. Most of those I contacted responded to me. Not really knowing who I am, they took me under their wing to enlighten me about the truth about AIDS. I have been left with no doubt that the AIDS Rethinkers really truly believe that HIV does not cause AIDS. In their minds, the propagation of the HIV=AIDS myth is the product of a government conspiracy in cahoots with a multibillion dollar pharmaceutical scam. They actually believe that antiretroviral medications are toxic poison. In their minds, they have not been duped like everyone else into thinking that HIV causes AIDS and one day the AIDS orthodoxy will crumble on its own lies. I looked one denialist in her eyes and asked her if she really believes these things about AIDS and she said without any hesitation “yes I do”. It is through these cordial and inquisitive exchanges that I learned most about this problem.

My relationships with denialists created some complicated arrangements that allowed me to experience denialism face-to-face. I often felt more like a journalist than a scientist, giving me a glimpse of how it must feel when denialist journalists delve into science. Still, it is important that I say that the denialists who interacted with me did not seem evil. They are deeply skeptical

of science and untrusting of government and big business. Some are surely misguided and others seem to foolishly believe that they understand everything there was to know about AIDS. But I did not find them evil in the sense they were intent on harming people, even though their actions surely are. Of course, those I have come to see as malevolent – the vitamin pushers, con men, and angry academics are the ones who did not respond to my attempts to contact them.

I gained as much of an inside view of HIV/AIDS denialism as I could. Obviously, at times I have felt quite sympathetic to some of the denialists. I am not sure if these feelings reflected something of a Stockholm syndrome, where I was identifying with those who seemed to become my psychological captures. In retrospect, I think I was just struggling to understand them as best I could, an understanding I have tried to convey in this book.

Writing this book posed some rather unique challenges. I have tried to remain objective and balanced in my examination of what the denialists are saying and who they are. Difficult as it may be, I have tried to take these guys seriously; even if not what they are saying then why they are saying it. I have also tried to avoid ad homonym attacks by focusing more on what the denialists are saying than who they are. But that too was difficult. This book is a psychological perspective on denialism, so the denialists themselves are central to the story. In this case, the messengers may be as important as the messages. I also struggled with what to consider science vs. pseudoscience. Including someone and their work under the rubric of pseudoscience was never taken lightly. As a guide, I used standard definitions of pseudoscience and I spoke with colleagues and collaborators of those in question. I know that no one included in the discussion of pseudoscience, and denialist journalism for that matter, will appreciate these labels. Nevertheless, I believe that the categorization is valid and meaningful. In a related matter, I spend considerable time discussing peer review, for all its value and deficiencies. When considering work as scientific and pseudoscientific, I considered whether articles had been peer reviewed. For this, I also relied on co-authors as well as the authors themselves to tell me if their work had been peer reviewed. Although some of the articles I discuss as pseudoscience did appear in peer reviewed journals, it is my understanding that the specific articles did not undergo peer review.

Another element of this book that I particularly grappled with was managing its citations and sources. I found myself wanting to cite numerous studies that support the facts that HIV causes AIDS and that antiretrovirals extend lives and prevent babies from becoming infected to debunk denialist claims. In doing so, I would have lost my footing and the very point of this book. This is not a book about AIDS and how it is caused by HIV. Rather, this is a book about HIV/AIDS denialism. I did not write this book to answer the

denialist claims, but rather to offer insight into their wacky and destructive world. I have maintained an electronic library of all my sources that I used to write this book should any of the websites be terminated. Given the nature of the topic, a lot of my sources are from Internet websites. Knowing that websites come and go, especially those on the fringe, I printed all of my sources as portable documents. I am happy to share these sources. In the chapter notes, I do not always indicate dates of websites accessed because I verified downloaded websites on a single day, February 13, 2008, unless otherwise noted. To request my sources and to learn more about my experiences infiltrating the world of AIDS denialism visit the Denying AIDS blog at <http://denyingaids.blogspot.com/>

Personally, I have come to view this book as just one straw on the back of HIV/AIDS denialism. A back that will not break until the public is educated to differentiate science from pseudoscience, facts from fraud. Denialism is defeated when credible science is effectively communicated to a trusting and critically minded public. My goal has been to offer a psychological perspective on what is essentially a psychological and social phenomenon. I do not view myself as an anti-denialist waging war against denialism. To the contrary, I am trying to understand what the denialists are saying and why anyone would believe them. As my South African friend Nicoli Natrass suggested, in writing this book I am offering a psychological autopsy of HIV/AIDS denialism. Although I find the problem of HIV/AIDS denialism fascinating, it is not my aspiration to immerse myself in the world of denialism any longer. I will now return to the less glamorous and mundane world of AIDS prevention and treatment research, where there are far fewer dramas and conspiracies to contend with.

Odd as it is, I find myself drawing this project to a close sitting and writing these words on the steps of Peter Duesberg's laboratory at the Donner Building in the shade of the beautiful trees on the lovely UC Berkeley campus. I suppose stranger things have happened, just not to me.

S.C. Kalichman
Storrs, CT

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In writing this book, I have also gained enormous support from a group of anti-denialists. I cannot thank them enough for opening their minds and pointing me toward invaluable resources. Nicoli Natrass at the University of Cape Town wrote the first book on HIV/AIDS denialism that inspired me to write this book and provided critical feedback on an early draft. Nicoli set a very high standard to follow and this book should be seen as an adjunct to hers. I am also grateful to Nicoli for writing the Foreword and providing a South African perspective. Thanks to John Moore of Cornell University for his insights into denialism and to Nathan Geffen of the Treatment Action Campaign for encouraging this project and pointing me toward Michael

Shermer and all those weird things that people believe. Other members of aidstruth.org, especially Nick Bennett, Brian Foley, and Bob Funkhouser were very generous in giving me their time and answering my questions. I also appreciate Mike Merson, Mark Wainberg, Jon Cohen and Martin Delaney for the time they took from their busy schedules to correspond with me about their views and experiences. I am grateful to Salim Abdool Karim, Glenda Gray and James McIntyre for sharing their experiences on the 2000 South African Presidential AIDS Panel and providing me with some valuable historically important documents. I am also indebted to the world's greatest political cartoonist, South Africa's Jonathan Shapiro (Zapiro), for giving me permission to include his art in this book. I also thank the Starbucks in Storrs, the De Luca Café in Cape Town, and Berkeley Espresso for giving me the space to work. I am also indebted to Joey for taking me places I could not have otherwise gone. Finally, I want to thank the HIV/AIDS denialist mentors with whom I had numerous email exchanges and conversations. I will leave them unnamed to protect identities, but I cannot thank them enough for their willingness to take me in even without knowing who I am.

This book is dedicated to the memory of Dan Dunable, longtime Atlanta AIDS activist, HIV treatment educator, and compassionate advocate against AIDS denialism.



Note on Terminology



Throughout this book I refer to denialism with specific reference to HIV/AIDS denialism. However, repeated use of HIV/AIDS denialism made for a cumbersome read. I therefore use the term “denialism” to exclusively refer to HIV/AIDS denialism. When referring to other forms of denialism I clearly indicate doing so, such as Holocaust denialism or 9/11 denialism.

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Getting Out of Denial

6

You can move a person out of denial by deliberately provoking them to anger. Hold up the future (sympathetically) so they cannot avoid or deny it. Tell them that it is not fair. Show anger yourself.

Elisabeth Kübler-Ross

Having immersed myself in the world of denialism, upon reflection I think it is best summed up as resembling a beehive. At first glance, denialism appears to be a chaotic swam of senseless and haphazard activity. But all of that random activity is really deceptive. Closer inspection reveals a highly organized social structure of leaders and drones, all sharing the common purpose of protecting the hive. I would not go as far as to say that denialism is as organized as a beehive, but it is also a mistake to think that denialism is a chaotic swam. What at first may appear to be a few crackpots and deranged scientists exploiting AIDS for some self-indulging gratification turns out to be a far more complex social and psychological phenomenon. And of course, sticking your hand in the hive will mean you will surely be stung.

What then is the social order of denialism? I see denialism as a whole best characterized as a three-tiered pyramid scheme. The top tier has been the focus of this book, occupied by those denialists who write literature to propagate AIDS myths. Their words are the most persuasive and provide the very basis for the denialist movement. The second tier is composed of those suspicious minded persons who gravitate toward conspiracy theories and pretty much anything that is anti-establishment. The individuals in this tier also propagate denialism because they contribute to discussions, list-serves, blogs, and whatever opportunities arise to express denialist beliefs. The third and largest tier of denialism is the least visible but it is also the most concerning. These people are most likely affected by AIDS, often having tested positive themselves or having a loved one who has tested HIV positive. These are often people who doubt their health care providers and already

mistrust the health care system. Ultimately, people affected by AIDS risk the greatest harm from denialism.

Denialism in all of its forms does the most harm to those who are its object, in this case people living with HIV/AIDS. All denialists can make for entertaining television and radio talk show programming. But Holocaust deniers inspire anti-Semitism, embolden neo-Nazis, instigate hate crimes, and even provide a rationale for heads of state to refute the legitimacy of Israel, as did Iranian President Mahmūd Ahmadīnezhādor in 2006 when he organized a conference to discuss whether the Holocaust had ever occurred. The greatest harm done by Holocaust deniers is to the Holocaust survivors. In the same way, it is the people who are convinced by denialists to refuse cancer chemotherapy and to instead take mega-doses of vitamins are the ones harmed by cancer denialism. And yet again, those most harmed by HIV/AIDS denialism are those who are infected with the virus. There are now countless HIV infected people who have avoided getting tested for HIV, rejected their HIV positive test results, ignored safer sex practices, failed to disclose their HIV status to sex partners, and refused HIV treatments for themselves and their children because they have believed denialists. Health decisions that are disinformed by denialist rhetoric are why we must care about denialism.

In and Out of Denialism

Having read a great deal of what the denialists have to say and having communicated at length with several of them myself, I am left to question how much any of these people actually care about AIDS and those affected by the disease. Denialists are often as obsessed with toxins causing cancer as they are with HIV not causing AIDS. These are the same people who are no more willing to accept chemotherapy for treating cancer than they are willing to accept anti-HIV medications. Interestingly, these same denialists implicate the National Institutes of Health, Big Pharma, etc. in both cancer and AIDS conspiracies. They also sell the same vitamins and potions for both cancer and AIDS. What denialists do apparently care about is the argument itself. It is the debate that seems to drive their interest in AIDS, not the other way around. None of the major figures in denialism has ever worked with HIV in the laboratory and none have worked with people infected with HIV. Some, including South Africa's president, have gone as far as to say that they have never even known a person who has died of AIDS, despite people close to them, sometimes even their children, having died of AIDS. This lack of sensitivity to the human side of AIDS brings me to conclude that denialism

is nothing more than a callous stream of pontification devoid of any socially redeeming value.

In some cases HIV positive parents, such as Kathleen Tysob of Eugene, Oregon and Canadian Sophie Brassard, have lost custody of their children for not providing them with HIV treatments after having been persuaded by the denialists. In other cases, such as Noreen Martin of South Carolina, people turn to holistic approaches to healing themselves, an individual choice that surely would be respectable if not for proselytizing to others. There are now web sites dedicated to people living with HIV/AIDS who provide testimonials regarding their discovery of denialism. For example, the web sites for Living without HIV Drugs, Alive and Well, and even the personal web site of University of Miami Biochemistry Professor Rudolf Werner lists the stories of people who tested HIV positive and chose to forego antiretroviral therapies. All of these people share in common their having gotten sicker when they were taking anti-HIV medications and then suddenly experiencing improved health when they stopped taking the drugs. Some say they have stopped for years. Their stories are all similar to Christine Maggiore's and offer a glistening lure to people in search of a cure.

I spoke with one man who posted his story on the Living without HIV Drugs web site about his decision to refuse treatments. He was definitely not in denial about his HIV status nor did he proselytize others to stop their treatment. He simply chose a path of natural remedies as his approach to managing his HIV infection. He had a partner who had taken HIV treatments and died of AIDS. He did not question the fact that HIV diminishes the immune system. He also did not question whether HIV causes AIDS. However, he did not feel the medications to treat HIV were the right thing for him personally. I found him genuine and caring, and he was not interested in persuading others to do what he had found right for himself. I believe that his views were also misrepresented by including them on the Living without HIV Drugs web site. Surely he was living without taking the medications, but the aims of the web site clearly say why they share these stories: "We want to share our stories with you, in hopes that they can be an inspiration and provide you with the hope that you, too, can live without HIV drugs and their very serious and damaging side effects. Keep in mind that the HIV medications that you may be taking now (or will probably be pressured into taking if you are newly diagnosed as HIV-Positive) can be, and often are more dangerous than the HIV."¹

There are also as many postings online of people who say they were lured into denialism, later realizing that they were getting sicker and in need of treatment. These stories also share some common characteristics including being coaxed into denialism and refusing treatment only to become quite ill and propelled back into reality. The following examples of people who were in and then out of denialism illustrate these themes:

I can testify that it isn't just newly diagnosed or vulnerable people who are likely to buy the denialist message. Well-educated on the subject and 10 years into the illness, I started reading the denialist arguments and they are very alluring. I stopped meds. . . became sick for the first time. I had an AIDS denialist doctor who told me to just stay off the meds even though my T-cells were in steady decline and I was beginning to opportunistic infections. When pressed, he admitted that it was all an "experiment" for him. I'm finally back on meds and doing well and VERY thankful for them, and thankful I didn't get worse than I did.

I was compelled by denialist thinking in the 90s. As an economist, their "follow the money" arguments made sense. In 2003 I left myself vulnerable for AIDS related Lymphoma because I was afraid yes, AFRAID to start HIV meds because of very compelling arguments by Peter Duesberg, Christine Maggiore & others. . . Four years on ATRIPLA [a 3-drug combination antiretroviral medication] – thankfully – after severe illness (following denialist recommendations) opened my eyes. On HIV meds, I have never felt better.²

One of the more famous cases of a person who moved into and out of denialism is the Zambian AIDS activist Wistone Zulu. His story is remarkably similar to those who report their initial attraction to denialism. Zulu had come to doubt whether HIV causes AIDS. As a well known activist in southern Africa, he was invited to serve on South Africa's now infamous 2000 Presidential AIDS panel. Zulu talks about how he saw the questions being raised about AIDS by the "dissidents" on the presidential AIDS panel as a way out of his HIV infection. He had always believed in questioning medicine and seeking alternative opinions. But now he believes that is where he went wrong, by listening to sources that appeared credible because of their credentials and accepting their word. He describes his seduction into denialism like this:

Amongst those that said HIV does not cause AIDS was Kary Mullis, the man who invented polymerase chain re-action – one of the technologies used to measure viral load. He went on to win the Nobel Prize for that. Perhaps the most well known dissident is Peter Duesberg, who until he espoused his dissident views was considered one of the top scientists in the USA. He, among other things, discovered oncogenes thought to be the cause of some cancers. He was a member of the American Academy of Scientists and used to receive thousands of dollars from the government for his research. Last but not least there is David Rasnick who is a recognized expert on protease inhibitors. There were also a number of others with impressive scientific and medical backgrounds who somehow felt the science did not add up. In other words, for me it was very hard to tell who was really in the know. What mattered to me as person living with HIV was to be told that HIV did not cause AIDS. That was nice. Of course, it was like printing money when the economy is not doing well. Or pissing in your pants when the weather is too cold. Comforting for a while but disastrous in the long run.³

Zulu had fallen ill from fungal infections and was so fatigued and that he could not walk. He then says he came to realize that “denialism was a lie.” He reversed his decision and sought treatment. His health improved and he has remained on HIV treatments, becoming one of southern Africa’s most vocal activists against denialism.

Why Denialism Will Not Go Away

One of the themes I have tried to communicate in this book is that denialism is self-perpetuating. It has therefore been a mistake of the past to ignore denialists in the hope that they will simply go away. If anything, denialism is becoming more prominent. Since 2006, several new denialist web sites have appeared, blogs have emerged, articles have appeared in the mainstream press, and books have been published. Mind you these new books say nothing new, but their increased presence is worrisome.

In just one year, between 2007 and 2008, The Rethinking AIDS Society has reorganized and spruced up its web site with David Crowe as the new president of the society. Rethinking AIDS has also gained a new media-public relations person and has launched a disinformation campaign against the Product (RED) initiative to provide HIV treatments in Africa. AIDS Rethinkers have also started to produce pod-casts and have appeared in several albeit irregular and off-beat radio talk shows. Also in the past year Peter Duesberg has experienced his own renaissance, with a full feature article in *Discover* magazine and a whistle blowers award from the Semmelweis Society, which he shared with Celia Farber.

Also in just the past year the President of South Africa Thabo Mbeki fired his progressive Deputy Health Minister who fell out of line with South Africa’s denialist policies. We also learned from an acclaimed biography of President Mbeki that he remains entrenched in denialism. The past year has also given us another African head of state, President Yahya Jammeh of Gambia, who claims that he can personally cure people of AIDS. The past year also found the US presidential campaign embroiled in controversy over Barack Obama’s former minister espousing his beliefs that HIV was developed by the government as a genocidal weapon against the African American community. The year also saw the persistence of denialist US policies from mandating abstinence based prevention programming, to banning needle exchange funding to restricting the entry of visitors with HIV/AIDS.

Given these recent events and the ever growing presence of denialism on the Internet, we should not expect denialism to go away. Although the first generation of denialists, and their AIDS scientist counter parts for that matter,

are not getting any younger, it would be foolish to believe that the death of the most visible denialists would lead to a demise of the denialist movement. Denialism, like any other corpus, lives on. There is also a second generation of denialists, including pseudoscientists, fringe academics, and journalists who all seem amply ready to carry the denialism touch. If anything, we should expect the deaths of the old guard to create a new class of denialist – martyrs. Indeed, when denialists are suspected to have died of AIDS their deaths become yet another spoke in the wheel of denialism.

When Denialists Die

Everybody dies eventually. But when a denialist is suspected to have died from AIDS it receives unique attention. On the one hand, anti-denialists seize the moment, using the deaths of denialists to make the point that these people have died earlier than they should have from a treatable disease. On the flipside, denialists are quick to respond that their comrades died of anything other than AIDS. One particularly vivid example was when prominent denialist activist of ACTUP San Francisco David Pasquarelli died in 2004 at age 37. It was widely held that he developed several HIV-related illnesses and succumbed to AIDS. However, because he also had served a jail term for activist-related charges, Christine Maggiore quickly claimed that the conditions that Pasquarelli encountered in jail killed him, not AIDS. In a response to Pasquarelli's death, Maggiore wrote the following rationalization:

Dave became ill after spending almost three months in jail without decent food, proper rest, and fearing for his life in almost every moment. He went in as a thin but healthy vegetarian who rode his bike all over the hills of San Francisco and as someone with food allergies and a childhood history of respiratory issues. He came out of jail malnourished, dehydrated, physically ill and emotionally exhausted. . . . While incarcerated, Dave had to live on a prison diet which is very low in quality and nutritional content, high in sugar and empty carbohydrates and he was prohibited from taking vitamins. He lived in a cell with an exhaust vent connected to the laundry room where inmates' uniforms were washed in toxic chemical detergents. Dave told me he would often wake up in the morning covered with a thin layer of orange fuzz that came from machines drying the inmates uniforms. He said they used floor stripper for laundry detergent when they ran out of soap. He also told me he was given unidentified immunizations without his consent. After Dave was released on bail, he realized that the only way to avoid trial and the possibility of returning to jail was to be sick. Being ill became a strategy and this situation turned into a medical nightmare in many ways including stints at Saint Mary's hospital where he could stay at no cost but received less than attentive care. For example, after complaining that an IV drip in his hand hurt, the shunt was

finally removed and a staff infection was noted (a common infection in HIV negatives in hospital settings), but by this time, the staff infection had gone systemic affecting his internal organs.⁴

Needless to say, many people endure much harsher jail sentences of longer duration than did Pasquarelli and they do not die of immune system failure. People develop infections but they do not typically become systemic in the absence of severely depressed immunity. Maggiore makes the important point that it may be unfair to draw conclusions on a person's cause of death in the absence of medical records and factual accounts. Nevertheless, the inability to penetrate denialist beliefs is apparent in the twists and turns used to spin these deaths. Being without satisfying relationships, unemployment, in financial trouble, depression, loss of friends and lovers, are all attributed causes for immune system decline and ultimately death of denialists. In the eyes of denialists, virtually anything could have killed these young people except for AIDS.

The anti-denialist web site aidstruth.org has created a memorial for when denialists die. In most cases, it is apparent that they had died of AIDS. Of course, even with treatment many or even all of these people would have died anyway. However, the evidence is overwhelming that if they had been treated their HIV infection would have slowed and AIDS may have been delayed. A few of the more notable examples of how denialists have spun the deaths of fellow denialists are presented here, as they were extracted from aidstruth.org:⁵

Robert Johnston a co-founder of HEAL Toronto and a co-author of the self-described a “rebuttal” of the Durban Declaration, where he wrote “Robert Johnston is a co-founder of HEAL Toronto, and has been HIV-positive since 1985 yet has suffered no unusual illness since that time. He attributes his good health to not taking any anti-HIV medications and to not believing that his positive antibody test has much significance.” Johnston died in 2003. David Crowe wrote that he died of “liver failure completely unrelated to AIDS.”

Raphael Lombardo was a gay man who believed Peter Duesberg's claims that HIV was harmless. Lombardo wrote to Duesberg on May 30, 1995, noting that he had never used any recreational drugs or pharmaceuticals and was not sick, despite testing HIV positive. Duesberg published the entire letter in his book “Inventing the AIDS Virus” and wrote of Lombardo: “His letter proves that true science does not depend on institutional authority.” Raphael Lombardo died of AIDS a little over a year later, on June 11, 1996. When asked about Lombardo's death, Duesberg wrote, “In hindsight, I think his letter was almost too good to be true. I am afraid now, he described the man he wanted to be [e.g. that

he did not use recreational drugs] and his Italian family expected him to be, but not the one he really was. I think he died from Kaposi's."

Peter Mokaba a senior politician in South Africa's African National Congress Party and a prominent HIV/AIDS denialist, died in 2002 at the age of 43 from AIDS-related pneumonia after a "long illness." He denied that he had AIDS and rejected antiviral drugs as poison. His death is often noted because of his close association with President Mbeki who claims to have never known anyone who has died of AIDS.

Marietta Ndziba was used by the vitamin entrepreneur Matthias Rath to market multivitamins as an alternative to antiretroviral treatment. In a pamphlet distributed in Cape Town, South Africa in September 2005, she was quoted saying that her CD4 count rose from 365 to 841 due to Rath's vitamins. She implied that these vitamins treated boils on her arm, her grey skin, diarrhea and vomiting. She said, "I just thank God that he brings vitamins here to South Africa to help our lives." According to the South African AIDS activist organization Treatment Action Campaign, Ndziba never took antiretrovirals. She died in about October 2005. One family member reportedly claimed that she died of a stress headache.

AIDS Realism

AIDS realism is best achieved through an objective and critically minded look at the AIDS science. But here lies the problem. Understanding the science as it is published in the scientific literature requires technical knowledge in a variety of complicated sciences, everything from biochemistry to virology. No one human being can possibly understand it all. As a psychologist, I have been trained to understand AIDS behavioral science. How foolish I would be to think that I could fully grasp the fundamentals of protein synthesis, reverse transcription, molecular bonding dynamics, genetic mutations, and who knows what else is involved in the biology of HIV infection. How then can I be so certain that HIV causes AIDS? As I have said several times in this book, it is a matter of trust. I trust the tens of thousands of research studies conducted by the thousands of scientists across the globe who also conclude that HIV causes AIDS. I also trust the structural engineers who say that the World Trade Center could not have gone down by a controlled demolition. I also trust the Holocaust survivors who say they were in Auschwitz. I also trust that the world is not flat, despite the way that it looks to me from 33,000 feet above.

AIDS realism requires that we trust true experts and scientists who know more than we do to decipher the technical details. It is all about trust. And

this is where it gets tricky. How can I be so sure that I am not being duped by Big Pharma, etc? What is my trust based on? My trust is grounded in three principles: credibility, contemporaneousness, and common sense.

Credibility

Earlier I discussed peer review for all its strengths and weaknesses. Still peer review is the best gage we have for assuring scientific authenticity. It used to be more difficult to know whether a scientist is established in the peer reviewed research literature. It is easier today to examine the messenger because of the Internet. Anyone can search the National Library of Medicine web site, <http://www.ncbi.nlm.nih.gov>, to find the work that any scientist has published in the peer-reviewed research literature. Let us say I search in the PubMed database for the name David Rasnick, who is often described as a prominent American biochemist. I will find 32 entries, most concerning Aneuploidy and some denote that they are correspondences or letters to editors, which are not peer reviewed. I can also see that Rasnick has as claimed by denialists, published on protease inhibitors, a key type of drug used in treating HIV. But Rasnick's work was with rats, not humans and for arthritis, not HIV. It is also easy to search the National Institutes of Health grants database, <http://crisp.cit.nih.gov/crisp/c>. Rasnick is not to be found in this data base. Looking further on the Internet, we can see that denialists claim that there is a censorship against AIDS dissidents, so perhaps Rasnick has been excluded from peer reviewed publication and NIH grants. How then does one achieve prominence in biochemistry while also being censored by the entire field of biochemistry? Researching denialists will ultimately lead to these same inherent contradictions between being an expert on the one hand and not having evidence whatsoever of expertise in HIV or AIDS.

With the notable exception of Peter Duesberg, there are no denialists who have the credibility that comes with passing through the filters of peer review. That is what makes Duesberg such an anomaly. It is his history of scholarship and science that brought him to be taken seriously by the scientific community. But Duesberg's current standing confuses credentials with credibility.

Contemporaneousness

Defined as being current or of the present, science should be evaluated in light of its contemporaneousness. Today, AIDS science moves at a faster pace than any other area of medical research, with the possible exception of cancer. To understand AIDS one should not have to look back further than the past few years. For the consumer-reader, if a scientific article was published before 2000, I would say it can be considered dated, perhaps even ignored. Books published

since 2000 should also be inspected for the age of their sources. Any writing in the area of AIDS that relies on sources from the 1980s should be suspect. Of the more than 116,000 scientific articles listed in the PubMed database concerning the HIV disease process, or HIV pathogenesis, over 31,000 have been published in the past 5 years. AIDS scientists are basing their conclusion that HIV causes AIDS on these current studies and these same researchers conclude that HIV treatments slow the progression of HIV to AIDS.

Common Sense

Think about it. Think about the gay men who never used drugs, who had been perfectly healthy and died of AIDS before there were antiretroviral medications. Suggesting that all gay men who have died of AIDS had used drugs, as Duesberg has claimed, reveals a stereotypic view of the gay community that can be considered nothing less than homophobic. Think about the fact that most people who test HIV positive do so late in the course of their HIV infection, many only after they had developed AIDS. Many of the people I have known who have tested HIV positive were indeed prompted to get tested because they became ill, including partners of injection drug users who themselves had never used drugs. How is it possible to believe that HIV treatments caused AIDS in these people? Think of the countless women with AIDS who have been infected with HIV by bisexual men; women who have not used drugs and who were ill before they get tested. Think about Africa. Is there any rationality in saying that AIDS is caused by poverty when some of the most impoverished countries in the world have no AIDS while southern Africa's richest country has among the largest AIDS problems? Blaming AIDS on drug abuse, HIV treatments, and poverty is an affront to every person living with this disease. Denialism is perhaps most offensive because it is an insult to our most basic common sense.

Critical Thinking – The Denialism Antidote

Unlike the scientific literature, denialist rhetoric is aimed at the general public. Denialist rhetoric can be quite convincing and alluring to almost anyone diagnosed with HIV. Delving into the science of AIDS on the Internet has become easier and sciences easily confused with pseudoscience. AIDS realism requires us to be at once open minded to find the newest in research and critical thinking to avoid being duped by the denialists. Below are some guidelines for using and interpreting medical and scientific findings reported on the Internet and in the media.⁶

Avoid Falling into Single Study Fallacies

No one research finding ever proves anything. Even the most compelling research studies require further analysis and independent replication before scientists themselves draw firm conclusions. One red flag is raised when a summary of research extracts a single sentence from a study to make the case for an argument. It is likely that the study finding is being exploited for the sake of denialism.

Consider the Source

Credibility of where the article is reported as well as the researchers themselves must be weighed when you hear about new research. As I discussed, credibility is built on reputations and trust, both of which can be very difficult to assess. Doing some investigative digging in credible places, like PubMed, can help. Information found on the Internet can be evaluated with the help of watchdog groups such as quackwatch.com. Red flags for Internet web sites include being based on old sources, especially dating back to the 1980s, not having a time stamp of their own with dates and updates, having dead-end links, and not providing contact information.

More Technical Does Not Mean More Credible

Reporters of sound medical science strive to simplify information whereas denialists and pseudoscientists create confusion through over-complexity. Lots of graphs and mathematical formulas can be a warning sign that the intent is to dazzle rather than inform.

If It Is too Good to Be True, It Probably Isn't

This old adage has been revitalized in the information age. Claims for cures and remarkable breakthroughs travel fast online. Trust your instincts and ask a friend for their opinion. Do not purchase a medical treatment without digging deeper to learn more about it.

Take It Up with Your Doctor

Finding new information about a medical condition is exciting and searching for information online can be empowering. Most doctors appreciate when their patients bring them new information to discuss. Asking your doctor if something new could work for you can help integrate each piece of care into the big picture. If you feel that your doctor does not listen to you when you bring him or her new information, or does not approach such information with an open mind, find a new doctor.

Be a Skeptic Not a Cynic

Not everyone is a doctor or scientist. When you find new medical information in a magazine or on the Internet, examine it with a keen eye of caution. Ask others what they think of the information. Look for independent sources that can confirm what you have found.

Be a Dissident, Not a Denialist

Remember, science has made great advances when pushed by outside thinkers. Being a dissident means listening to all sides and weighing the evidence. When a different view seems reasonable, entertain it. Challenge it. And when the credible evidence is overwhelming, accept it. The AIDS dissidents who have maintained their credibility are those who accepted the evidence that HIV causes AIDS and moved on to make new contributions. Those who refused to move on are stuck in denialism.

Anti-denialism

In keeping with one of nature's basic laws, for every action there is an equal and opposite reaction. The world of denialism is therefore met with the anti-denialist movement. Anti-denialists are, for the most part, the very same AIDS scientists, journalists, and activists who have been the target of the denialists themselves. The *Durban Declaration* that was published in 2000 (Chapter 5) was the first major effort by scientists to counter denialism. Coming off of the International AIDS Conference in Durban South Africa, especially after President Mbeki embraced the denialists, AIDS scientists have since published editorials in major newspapers and have written extensive commentaries and correction pieces on denialism and AIDS pseudoscience. The *Durban Declaration* marked a major shift among AIDS scientists who had ignored denialism hoping it would simply go away. Failing to respond to denialists became impossible, especially once they were embraced by South Africa's President.

Significant efforts to combat denialism have come from AIDS activists, scientists, and journalists. Martin Delaney, a San Francisco AIDS activist, has countered AIDS misinformation and disinformation through his work as Director of Project Inform, a leading AIDS information and education organization. Among the most visible anti-denialists are John Moore, an AIDS scientist at Cornell University, Mark Wainberg a leading clinical AIDS researcher at McGill University, and Jeanne Bergman, at The Center for HIV Law and Policy in New York City. They have published pieces to raise awareness of denialism in several high profile outlets, including the *New York*

Times, and regularly engage in counter arguments on Internet blogs and various web sites. In South Africa, the Treatment Action Campaign's Nathan Geffen and University of Cape Town Professor Nicoli Natrass have been at the forefront of refuting denialism in their country.

One of the more colorful examples of anti-denialists responding to denialism came when a group of scientists and activists documented more than 50 fundamental errors in Celia Farber's 2006 article "Out of Control" published in *Harper's* magazine. Like the need to respond to Mbeki's AIDS panel with the *Durban Declaration*, the response to Farber was necessitated by the visibility that *Harper's* magazine brought to denialism. A group of AIDS scientists, journalists, and activists started aidstruth.org which defines its mission around the need to respond to Farber's *Harper's* article, stating "In March 2006, after *Harper's* magazine published a feature article by AIDS denialist Celia Farber, a number of scientists and activists joined together to create a web site for the purpose of countering AIDS denialist misinformation and debunking denialist myths, while providing truthful information about HIV and AIDS. The result is the aidstruth.org web site."⁷ Because most of denialism is spread via the Internet, anti-denialists have established a considerable presence online. In this sense, anti-denialism is meeting denialism on its own turf.

Another significant anti-denialism presence online has been launched by one of the most credible and widely used sources for AIDS information, thebody.com, which has rapidly responded to denialism with commentaries and open forums. AIDS scientists have also become more active in responding to denialist claims on the Internet directly by writing letters to editors, university administrators, and others who could be misled into thinking denialist claims are legitimate dissidents.

Defeating Denialism

We have learned the hard way that denialism will not be defeated by ignoring it. Denialism will also not be defeated in a debate. Educating people about the basic truths of AIDS is of course essential to defeating denialism, but it would seem that education alone will not be enough. The mistrust of science and medicine behind denialism will not be penetrated by education campaigns and easy-to-understand brochures. For the part of the AIDS scientists, we must become better at communicating with people other than our fellow scientists. We also have to stop making predictions about the future that only undermine our credibility when they do not pan out. Legitimate dissidents in AIDS science should also have greater visibility. It helps the science when the

public sees that there are legitimate disagreements among scientists. Having a more transparent scientific process will help dispel myths that reduce scientists to a monolithic orthodoxy. Public trust in science will also benefit from explanations of peer review, for all of its strengths and shortcomings. Making science and medicine more accessible to the public will help people distinguish between real science and that which masquerades as science.

Trust is also established when doctors, nurses, and other health care providers listen to their patients. Being open to complimentary treatments can make the difference in keeping patients on their course of treatment. Patients should be informed of what to expect in terms of side-effects with solutions in hand for managing them when they do occur. I have been struck by how many people turn to alternative remedies because they felt their doctor did not listen to their needs or concerns. There is no harm in a person taking their HIV treatments with blueberry juice, but telling them that they are crazy to think their blueberry juice will clean their body of toxic poisons will only serve to alienate some patients while infuriating others. Patients who trust their providers have fewer reasons to turn to denialism.

Journalists also play a critical role in defeating denialism. Journalists cannot rely solely on scientific credentials for authenticity and unfortunately tenure makes it impossible to know whether scientists are credible simply because they hold a professorship at an esteemed university. Journalism does a disservice to the public when denialists and pseudoscientists are elevated to legitimacy simply because they have the stature of an emeritus or professorship or whatever. It should matter when a professor who espouses that HIV is a harmless passenger virus also claims that there is no genetic basis for any cancers, or when a Nobel Laureate who says that HIV may not even exist also says that he has been abducted by aliens, or when a Professor Emeritus claims he has found the proof that HIV does not cause AIDS also says that he believes in big green monsters lurking beneath Scottish waters. None of these facts are hidden and they should not be ignored when journalists engage in real fact finding.

Ultimately, everyone who cares about AIDS and those who are affected by this scourge has a responsibility to defeat denialism. It's easy to understand why someone would embrace the idea that HIV is harmless, or that their positive HIV test means nothing, or that they can remain healthy without taking medications. People who are facing a debilitating and life threatening illness are not always in the best state-of-mind to be critical thinkers, ask questions about where their information came from and how it is known to be credible. Sometimes simply reflecting back what a person is saying can help them hear how nutty it sounds. And even when someone goes down the road of denialism, it is important that they are not shunned or abandoned.

The rude awakening of illness dealt by HIV infection does invariably come to those people it afflicts, often snapping them back to reality and out of denialism. Perhaps the best we can do is simply to be there for them when they come back to realism. Talking about AIDS and the real challenges it brings is the one thing that we can all do to bring about the day when we can say “those guys are no longer still around.”