The American Association of Immunologists
Oral History Project

Transcript

Anthony S. Fauci, M.D.
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Interview conducted by
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Williams: This is an interview with Dr. Anthony S. Fauci for the American Association of Immunologists (AAI) Oral History Project. Dr. Fauci is the Director of the National Institute of Allergy and Infectious Diseases (NIAID) and the Chief of the Laboratory of Immunoregulation at the National Institute of Allergy and Infectious Diseases. He was awarded the AAI Public Service Award in 2000 and the AAI Lifetime Achievement Award in 2005. We are in Dr. Fauci's office in the National Institutes of Health (NIH) campus in Bethesda, Maryland. Today's Wednesday, December 9, 2015, and I'm Brien Williams.

So, Dr. Fauci, I thought we'd start out by telling me a little bit about your family background, where you come from.

Fauci: Well, I was born and raised in Brooklyn, New York, which is not unlike a lot of scientists who are at the NIH and the AAI. My parents are first generation Italian American. They were born in New York City, moved to Brooklyn. I was born and raised in Brooklyn, went to elementary school in Brooklyn, Catholic elementary school, and then from there went to Jesuit High School in Manhattan which was an all-scholarship high school run by the Jesuits, called Regis High School, very much steeped in the classics, Greek, Latin, Romance language, ancient history, with some science.

So although I was interested in medicine while I was in high school, it was in the backdrop of a humanities background, and I actually extended that in college and went to another Jesuit college, Holy Cross, College of the Holy Cross in Worcester, Massachusetts, which was a very interesting hybrid of doing classics again, with Greek, Latin, French, philosophy, together with just enough science courses to get into medical school, and from there I went into medical school.

So I'm New York born and raised and did my elementary school, high school in New York City, and then I actually came back to New York City to go to medical school at Cornell and also do my internal medicine training there.

Williams: Let's step back one generation. What about your grandparents coming from Italy?

Fauci: My grandparents, both sides of my mother and father's parents, were born and raised in Italy. My father's parents were born in Sicily and came to New York City and landed in the famous Little Italy at the turn of the century. A few years later, my father was born in New York City. My mother, the same thing, her family came from a different part of Italy, part from Naples, part from Genoa, again arrived in New York City in the Little Italy section of New York City right around the turn of the century, and my mother was born a few years later in New York City.

Williams: And your father's profession?

Fauci: My father was a pharmacist. He went to Columbia College of Pharmacy in New

very strong affinity for science. I liked the inquisitiveness of science, the experimental nature of science, the issue of solving a problem in a scientific w
ay,
and I felt the best way to match my interest in people, my interest in the

and the host, because the birth of human immunology was just starting, and he was interested more in the nonspecific host defense mechanisms, and he wanted to build up a cadre of young people who would be interested in the classical immunology interaction with the microbe in question, whatever that microbe was.

Back then when I came to the NIH in 1968 for my three years of a fellowship, I went into the lab and I started studying fundamental basic immunology, and I had never really done basic work before. I did a couple of clinically related lab projects in medical school as an elective, but I certainly didn't have an M.D.-Ph.D., and I didn't have a year off doing research. So it was straight out of clinical training, so I just sort of hit the ground running here.

At the time, there were very few people who were devoted to human immunology. There was Bob [Robert A.] Good, who was in Minnesota at the time, there was Tom [Thomas A.] Waldmann, who was already here at the NIH, and there were a few others who were doing that. So I got interested in that and intensively studied immunology, first in a guinea pig model and then in the human model for three years.

Then I had to make a decision what I wanted to do with my life. Did I want to go back to New York where I had originally planned to get an academic appointment and be a clinical teaching clinical research doc, or did I want to stay and pursue a much more intense basic immunology wedded with human clinical work? So Dr. [Sheldon M.] Wolff, my mentor, offered me a position to come back to the NIH after I did a chief residency in medicine. So I did three years here at NIH as a fellowship. It was combined at the time. It was a fellowship both in infectious diseases and in immunology and allergies, so that at the end, you got board-certified in both specialties. So at the end of the day, I was certified by the American Board of Internal Medicine, by the American Board of Infectious Diseases, and by the American Board of Allergy and Clinical Immunology.

But, again, I was very interested in that interface between the microbe and the host, so I decided that I would go to New York, do a chief residency, get my clinical training really solidly based so that I was as much a clinician as I could be. Then I came back to the NIH in 1972, and I was made an independent young investigator probing the regulation of the immune system, and I have been probing the regulation of the immune system ever since. Did that for about nine years, from 1972 to 1981, studied probably less infectious disease than immune mediated diseases, some of the inflammatory vasculitides, what was called Wegener's granulomatosis at the time, polyarteritis nodosa, some of the hypersensitivity, and we were treating the patients with immunosuppressive drugs at the time, glucocorticoids and cytotoxic agents.

So together with Dr. Wolff, who was a very generous mentor, put me in charge of a group of patients and we developed some striking remission-inducing, if not cures, for these formerly fatal diseases. So there was a clinical component to

what I was doing, and I was fortunate to get very successful in essentially finding what was considered a cure, but it was really a high rate of remission in about 98 percent of the patients who were normally 100 percent fatality.

At the same time, I was trying to study what the mechanisms of the cytotoxic and immunosuppressive drugs were on the immune system, because as you suppressed the immune system, the disease went into remission. So we did a whole series of studies from 1972 through 1981, '82, studying the regulation of the immune system and the perturbations of the human immune system, both in disease and when

what it is." It's completely destroying the immune system or at least the secondary effect of this viral infection is destroying the immune system.

So I decided, despite the rather dramatic positive trajectory of my career doing all of these good things in human immunology, I decided I was going to turn around the direction of my career and start studying this bizarre new disease even before we knew it was HIV. So I started intensively studying it. So I kept up the immunology part of my lab that was basic fundamental immunology with some of my postdocs, but I, myself, started the HIV/AIDS program before it was HIV, because this was 1981, '82, and HIV was discovered in 1983, '84. And for the next thirty-four and a half years until today, that's what I've been studying, was HIV/AIDS in the context of a model of the destruction of the immune system.

Williams: I want to go back and just ask you one follow-up question. When you went back to New York, where did you do your

Fauci: I did my chief residency in the same place that I went to medical school and did my internship and residency. It was called then the New York Hospital-Cornell

with 37 million deaths and 38 million people living with HIV. So my prediction it would explode, unfortunately, came true.

In fact, it was interesting, because as I made that change from classic immunology to AIDS- and HIV-related immunology, my mentors thought I was nuts. They said, "Why are you throwing away an incredibly promising career to study a disease that who knows if it'll go away in a year or so, for all we know about it?" So I remember I had to write what I called my *apologia pro vita sua*, or my Latin version of why I'm doing what I'm doing, my apology for my life, and I wrote an article in the *Annals of Internal Medicine* that I wrote in the fall and winter of 1981. I sent it to *The New England Journal* They didn't want it because they thought it was a little bit too alarmist, because I said that this disease was going to explode, and anybody thinks that it's going to stay localized to a population really doesn't understand infectious diseases. Got published in the spring of 1982, and that's what I said in the article, and, unfortunately, it was prophetically true, and we had a horrible, you know, one of the worst pandemics in history.

And probably one of the best things I ever did was during one of their disruptions

Williams: You describe yourself as a real pioneer in terms of reading these reports and beginning to put together the connection between the disease and your own research interests, despite the fact your colleagues were saying, "Don't go in that direction." When did you begin to get colleagues coming in with you?

Fauci:

needed more money, and, to his great credit, he said, "Yes, if you can make a good scientific and public health reason."

At the time, the Assistant Secretary for Health, who at the time was the one who was very much influential in how much money the NIH got, Ed [Edward] Brandt, I went to him personally and said, "We're dealing what I think is an exploding epidemic. We can't just put an extra $5 to $10 million. We've got to talk hundreds of millions of dollars."

Luckily, at that time the NIH budget was really quite flexible, and we did finally get OMB [Office of Management and Budget] and the Congress, who was very helpful, to start making the budget go from $5, $10, $20 million, a few hundred million, several hundred million, so that today the AIDS budget for NIH is over $3 billion.

Williams: Part of your responsibility probably became appearing before Congress?

Fauci: Yeah, that's something that I take pride in, but also when I think about it I get almost exhausted, because I, for a variety of reasons, have almost certainly testified before Congress more than anyone else in history. And the reason I make that rather bold statement is that when there are important problems in Congress, you usually get someone for a year or two who will testify several times. I've been testifying before Congress for thirty-

and capability of senators and congressmen and background varies greatly. So you may have a committee where there's someone there who has really no

said, “What are you clapping about? What did I do?” And they told me what was on the debate last night.

So we really became very good friends. And then when he became president, then that was great. That’s when I had my most influence of getting the budget up, because he would call me in and circumvent all the different things and say, “What do you think we should be doing?” And I kept on arguing very strongly for biomedical research—in general, it was important. You needed to do more money for HIV, but you needed to do more money. And he listened, and the budget really went way up. So that was a great relationship.

I had a very good relationship with Clinton, not nearly as strong as George H.W. Bush, but really quite cordial, because Clinton, at first, when he saw how friendly I was with Bush, thought maybe he was kind of—I’m apolitical;

Bush, who told me, “I want you to go to Africa and come up with a plan that’s a feasible plan, not a pie in the sky, a feasible plan that is accountable, that’s responsible, and that will transform HIV.” So my relationship with President George W. Bush was very strong because of his very strong commitment to HIV/AIDS in the developing world, which was one of my major interests.

Then when President Obama became president, President Obama continued that and was very interested in global health, was very interested in the kinds of things that we’re interested in. So I had the privilege of advising him on public health issues: pandemic flu, swine flu of 2009, Ebola. I was at the White House—you know, I can’t count how many times I went to the White House to talk either to the president, the vice president, the chairman of the Joint Chiefs of Staff on the security aspects of Ebola.

So just on the basis of the fact that my discipline of infectious diseases and global health was intimately involved in many public health and global health crises, that just by the nature of the fact that I was there for such a long time, that I was a very visible scientist, that I had been the director of the Institute for such a long time, I was tu

Williams: When you were advocating for all this funding, like with George H.W. Bush, where were the funds going? Was it becoming AIDS research much more diffuse across the country or what?

Fauci: No. Well, actually, there were two things. When I was arguing for funding from George H.W. Bush, it was for HIV/AIDS science in general, one. So that's everything basic immunology, vaccinology, drug development. We established the clinical trials unit, which is responsible for testing virtually every one of the drugs that is used now that has transformed the lives of HIV-infected individuals. But I also was arguing more generically for funds for NIH in general, not just funds, because I felt it would be counterproductive to just focus on one area. So I argued the importance of HIV/AIDS, but I also said that if you're going to give the NIH money, you've got to give all of the NIH money. You can't just give money to one area. So we were able to be fortunate to get a lot of money for HIV/AIDS, but a lot of money for a variety of other things.

When I dealt with George W. Bush, I didn't ask for a penny for NIH. Every bit of the money that I asked for the PEPFAR program was to go to the developing world to provide prevention, treatment, and care. In fact, that was one of the reasons why Josh Bolten, who was very much in partnership with me in that time—he was the deputy chief of staff to the president at the time—Josh was surprised that I didn't ask for money to develop a vaccine and put all the money into NIH and NIAID. I said, "No. If you really want to do something now for the people of southern Africa, you have to do treatment, care, and prevention. I mean, it's great to have a vaccine, but people are dying by the millions per year now, and we've got to do something about that." So I said, "We'll get to a vaccine later. We're doing a lot of good work on it. Right now we need to put a lot of money into the PEPFAR program." When I proposed the PEPFAR program, that it be $15 billion over five years with an average of $3 billion a year, now subsequently,

live in a world that something that happens he

Fauci: Well, I'm trying to be cautiously optimistic with them, in the sense of saying you hear a lot about the constraints in resources, but you've got to remember, even with the constraints in resources, the excitement of a career in science, particularly the biomedical sciences, is really unmatched, because we are now in a period where the scientific opportunities, given the technologies we have, and given the advances that we have made, that for every one of those important advances, you open up the opportunity for even more advances. So I can't think

“We’re going to get a vaccine for this. We’re going to get this for that.” And they don’t focus on “Just give us ideas and I don’t even care what the idea is. I just want this idea to pop up in the mind of a bright investigator.” The NIH

Fauci: My pleasure.

[End of interview]