Population and Reproductive Health Oral History Project

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Willard Cates

Interviewed by
Rebecca Sharpless

May 25–26, 2004
Research Triangle Park, North Carolina

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Narrator

Willard Cates, M.D., M.P.H. (b. 1942) is president and CEO of Family Health International (FHI), which he joined in 1996. Prior to FHI, for two decades he was at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia, where he directed the STD/HIV prevention efforts and headed the CDC's abortion surveillance activities.

Interviewer

Rebecca Sharpless directed the Institute for Oral History at Baylor University in Waco, Texas, from 1993 to 2006. She is the author of *Fertile Ground, Narrow Choices: Women on Texas Cotton Farms, 1900–1940* (University of North Carolina Press, 1999). She is also co-editor, with Thomas L. Charlton and Lois E. Myers, of *Handbook of Oral History* (AltaMira Press, 2006). In 2006 she joined the department of history at Texas Christian University in Fort Worth, Texas.

Restrictions

No

Format

Four 60-minute audiocassettes.

Transcript

Transcribed, audited and edited at Baylor University. Transcript has been reviewed and approved by Willard Cates.

Bibliography and Footnote Citation Forms

Audio Recording

Bibliography: Cates, Willard. Interview by Rebecca Sharpless. Audio recording, May 25–26, 2004. Population and Reproductive Health Oral History Project, Sophia Smith Collection. **Footnote:** Willard Cates, interview by Rebecca Sharpless, audio recording, May 25–26, 2004, Population and Reproductive Health Oral History Project, Sophia Smith Collection, tape 1.

Transcript

Bibliography: Cates, Willard. Interview by Rebecca Sharpless. Transcript of audio recording, May 25–26, 2004. Population and Reproductive Health Oral History Project, Sophia Smith Collection. **Footnote:** Willard Cates, interview by Rebecca Sharpless, transcript of audio recording, May 25–26, 2004, Population and Reproductive Health Oral History Project, Sophia Smith Collection, p. 23.

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Sharpless Today is May the twenty-fifth, 2004. My name is Rebecca Sharpless, and this is the first oral history interview with Dr. Willard Cates. We are in his office in, well, I guess this is Research Triangle Park, or you call it Durham, or—

Cates Well, it's both, but Research Triangle Park is the official name.

Sharpless In North Carolina, and this is part of the Population Pioneers Project. Dr. Cates, thanks so much for fitting me into your busy schedule today.

Cates Well, thanks, Rebecca. It's an honor to be part of this.

Sharpless Well, I'm delighted to be here. What I want to do is start back at the beginning, and to give people a sense of how you got to this point. When you were an undergraduate, you were a history major?

Cates Correct.

Sharpless Tell me about your history days at Yale.

Cates Wow. Well, you know, when I got to Yale, I didn't have a clue about what I was going to be doing. I was sort of a generalist. I just looked around for the types of courses that I thought I would enjoy. And by my sophomore year, I took this wonderful history course on the French Revolution from about 1780 through Napoleon, and the lecturer was marvelous. He just turned me on to history, and I decided that I was going to major in that. In fact, I

thought for a while when I left Yale even on graduation, I thought I was going to get my Ph.D. in history and be an academic in history. But then I obviously changed my mind and decided to go into medicine. But history was fun. Some interesting things just in terms of my Yale classmates, in another two weeks I'm going to go up to my fortieth reunion, and two close friends are in my class. One was a history honors major, of which there were ten of us who met weekly to discuss a particular book that we'd read and topics. That was John Ashcroft, the current attorney general. Very interesting sort of background that he has. Now the second was a friend who was, who grew up near me. I grew up about an hour away from New Haven and this person grew up in Stamford, Connecticut. Because we sort of came from that same general area and had friends in common, I got to know him my freshman year and we remained friends to the present time. I haven't seen him recently, and that's Joe Lieberman. So there for a while we had two, you know, one class that had two of one hundred senators, and now we have one class that has both, you know, the attorney general and a former vice-presidential, former presidential candidate still currently senator from Connecticut. So it was a fun class with a very interesting time in New Haven. In fact, I remember New Haven in my life, I've just been sort of thinking about it because in preparation for reunion and all. In the 1960s, uh, was really a fascinating time in our country in general, but in New Haven in particular. And I was an undergraduate who, you know, was just a general, you know, worked hard, enjoyed sort of what I was doing, but really did a lot of extra-curricular activities and so on. Um, but of my class of about a

thousand people, all male in those days, I think there may have been as many as five African Americans. And a majority of kids had gone to prep school. So you had something that was the old stereotypical eastern establishment school.

Sharpless Did you go to prep school?

Cates No, I went to a public high school, but that was a type of, a sort of revolt. I'm a third-generation Yalie, and my grandfather and father had gone to prep school, but I was madly in love with a woman in high school, and refused to leave her, you see. So I stayed and went to public high school in, you know, you know, a relatively well off, suburban town. So it wasn't exactly a struggling education of today's innercity life or anything, but I was a public high school guy, but, um, you know, I'd been very much a part of a network that was, you know, a WASP-y male network. And then I majored in history. Always said about Yale that I, you know, had so much work to do, I never had time to think because it was sort of like today. But when I was in the States and was concerned about achievement, working hard to achieve. And then I was fortunate enough to get this relatively unique scholarship to Cambridge.

Sharpless Let me ask you—

Cates Sure.

Sharpless You said that New Haven was interesting. Why was it interesting?

Cates Well, I'm going to tell you, during the decade of the sixties—

Sharpless Okay.

Cates —there was this remarkable evolution of the town which reflected a

microcosm of the country.

Sharpless Okay, go ahead.

Cates So I graduated as a young Republican, John Ashcroft type out of Yale, went to England where I had so much thinking to do, I didn't have time to work. It was sort of the total hundred and eighty degree opposite. I was, you know, a huge, sort of, libertarian would probably be the closest way to describe me before I left for England, and I came back much more Socialistic thinking in terms of the greater good for the greatest number. I became really imbued with the philosophy of a person named Jeremy Bentham, who was a English political philosopher of the nineteenth century who formed this theory called Utilitarianism with the greatest good for the greatest number, and I think it was that evolution, and, plus, it was the Vietnam War, there was a lot of anti-American feeling. Sixty-four to '66 was when I was in Cambridge. Decide to go into medicine, come back to Yale. Had to make—I spent a year making up pre-med courses. But the world had, just like I'd gone through a hundred and eighty degree change, the world of New Haven had gone through a hundred and eighty degree change as had the world itself. There was the Vietnam Protest, there was the Black Panther movements of which New Haven was head center. There were the killings of, by this time, MLK and RFK, and, you know, America was turned upside down by 1967, and, you know, then we went through the days of student protest unrest. Yale became co-ed, and by the time I graduated from medical school, having spent apart from that remarkable '64 to '66 period of time in my life in England, where it shaped me even from a public health standpoint, um, as I

look back on it, the world had changed so much it was by 1971 there was a transformation to Yale as a co-ed, affirmative action head, front end of the bell-shaped curve, affirmative action school espousing, you know, having a liberal enough administration always kept just ahead of the SDS days and the student sit-in days. And so, you know, it was a remarkable place and a remarkable sort of crucible in which to have those formative years of my twenties in which I was an undergraduate. I had this pivotal time in my life which was going to England, getting away from the U.S., coming back, and then fitting in to the whole new atmosphere of the day, the late sixties. You know, we had William Sloan Coffin there which, who was the anti-, one of the anti-war leaders, uh, just everything. We had, as I say, the center of the Black Panther Movement. I had moved from being this young Republican to being, you know, a young in the streets guy, long hair, long sideburns, a leader in the Student Medical School Movement, that actually was doing, at the time, some family planning outreach in low-income populations which turned out to be my first paper I ever wrote. That was right at the time in Connecticut, which in 1966 that I got back to had just passed this, um, Griswold Supreme Court decision that allowed Planned Parenthood to actually function in Connecticut, and I was one—in fact, for my first job back in the States, I worked for Planned Parenthood distributing family planning information in low-income neighborhoods which sounds remarkably naïve nowadays, this young, well-meaning, but, you know, WASPy guy going around knocking on inner-city doors asking women if they wanted contraception, you know. But it was well meaning, but

remarkably naïve as you look back with today's lens.

Sharpless Tell me a little bit more about your exposure to Jeremy Bentham. How did that happen?

Cates Well, that's a good question. When I went—when you go to England, you're sort of asked what topic do you read, and I chose history. And England is fascinating, you don't necessarily take a lot of courses, um, you read so you prepare yourself for exams, and you can go to any lectures you want. Well, there was this wonderful—in fact, one of my topics that I chose was political philosophy, and, as such, there was a series of reading that you had to do, and, for some reason, I just picked up Bentham, and it was a time when I can really put a—as I say, I had so much thinking to do, I didn't have time to work. So I really immersed myself in reading philosophy, trying to think through how the logic fit together, and I just got very much taken by his writings in which he was really a reformer of his day. He sort of provided the political rationale for the social movements that led to, um, you know, the increasing sharing of wealth within England in the mid to late 1800s really, from the mid to late 1800s on. And so I mean that, and anyway, and the utilitarian themes which is in a nutshell the greatest good for the greatest number, you're always making these decisions, really plays out to be the theme of what public health is all about. Um, you're making decisions for their population level effects even though at the individual level there may be some tough tradeoffs that you're dealing with. So, um, that, at any rate, that's sort of the way I, just by a reading session and having access to his political writings, and then having a whole semester where I spent time reading

political philosophies. John Stuart Mill was another one that led on to Jeremy Bentham.

Sharpless Um-hm. Were there people that you talked with there in Cambridge about these ideas that you were being exposed to?

Cates Yeah. What a great question. Um, Cambridge was just a continuation of some fun discussions that I'd had at Yale, but in much greater depth just because there was so much time, and, in fact, the way it worked was, as I say, you got a very general political philosophy in the 1900s reading material, and you knew at the end of your two years you were going to get a question on it. So for one eight-week period, they had three semester on eight weeks apiece, I devoted myself to that, and I—you have a, um, what's it called, a reader I think it's called, it was just a mentor at Cambridge. And, um, you meet—I met with him one hour a week every one of those eight weeks in which we would, I would have prepared a five page paper on the book that we had decided the week before that I would read for that next week, and then he would sit there—I'd hand him my paper as I walked in the door—and we would discuss whatever ideas I had on the front of my mind, and I'd go out having learned. But where you really learn is just at, you know, you, at, after I'd gone to, you know, one of my movies that night, I mean you're going to all these much more erudite movies than I'd ever go to today, but then you'd come back, and you'd inevitably wind up having coffee with your buddies at, you know, in one of the Cambridge rooms talking all hours. And they're just, it was just an opportunity for me who'd led a relatively isolated Northeastern Yankee life to have horizons totally broadened by that

experience.

Sharpless What kinds of people were your colleagues?

Cates Um, wow, a whole spectrum of people. I mean, the thing about Cambridge, and it being a meritocracy—and especially Kings, which was among the more, which I didn't realize, it was just Yale had this direct Paul Mellon funded fellowship to King's College. Um, but it's a meritocracy and relatively egalitarian and much more international than Yale ever was. There was—one of my classmates was, um, Peter Kenyatta who was Jomo Kenyatta's, you know, one of Jomo Kenyatta's multiple sons, but from Kenya who was studying at Cambridge at the time. Um, my closest friend was a person who was from, actually, a London prep school, but a classics major and a person who was on the socialist left and did a lot to sort of educate me, to actually initiate and then continue my education in, from a very traditional Republican, Yankee way of looking at things. Um, but a whole host of different, well, I should say, people and lifestyles. Another, you know, I remember because it had an emotional effect on me as well, was I, you know, I was playing rugby just because that was—I had an opportunity as an intramural sport, they have a lot of intramural sports. I was looked on at the time as a big American, I mean, compared to some of my colleagues. But anyway, so I, they put me in the middle of the scrum and they—but, um, I remember about halfway through the season, we were at one of these night talk sessions, and they said, Well, don't you realize that Rupert, or whatever his name was, is a homosexual, and this is like 1965. And I said, "You're kidding. I mean, I'm right next to him in the scrum all the time." I mean, and

you couldn't have, I couldn't believe I knew anybody who was one. And so I, um, it took me about a week to process just because it so shook my emotional foundations at the time, and after working through it, I really realized within myself, Big deal. You know, just because I may not be of that sexual orientation, who cares whether anyone else is, doesn't threaten me at all, even though it had seemed like a huge threat initially. But I needed that week to work through it, and then from then on I, you know, had a much more tolerant, if you want to think of that view of, which I had a much more tolerant view of life coming out of the English hundred and eighty degree different experience which turned out, you know, and again it was just a wonderful, life-changing experience. I met my wife over there. Uh, not, she's American, and, turns out, she was a, you know, another one of these WASPy colleges, Smith, and doing *la grande* tour during the summers, and was at a friend of my sister who was at that same school in the same house. And I met her through my sister, but I met her in Europe. But it was during that summer, I'm convinced, that meeting my wife, realizing within a day and a half that I'd just met the woman I was going to marry which she didn't know at the time, but which I was convinced, had to pursue her through all of Europe that summer in order to convince her, but it was realizing, Uh-oh, I probably, you know, pretty serious about this woman. I'm going to have to quit being so much of a dilettante, and get more serious. And it was at that point that I sort of said, Well, maybe I will be a doctor, and let me try that.

Sharpless Now, how did you make the switch from history/humanities to medicine?

Cates Well, one of the fields that I read over in England, you had six history field,

was History of Medicine, and I had, you know, played with medicine among probably ten other professions at some point, from theologian to a lawyer. Everybody in my class was a lawyer. But, uh—

Sharpless What was your dad?

Cates He was a businessman, Wall Street insurance broker basically. Um—

Sharpless So was businessman somewhere in your repertoire?

Cates Uh, probably at some point I tried it, but it wasn't—it didn't really turn me on that much for part of it. And I think I really envisioned myself being a student my whole life, and my father was afraid of that too because I, you know, undergraduate, went to Cambridge, went to med school, he was convinced I was going to go to law school next, and divinity school and retire at sixty-five. (laughter) But—

Sharpless It happens.

Cates Yeah, yeah. (both laugh) At any rate, I was—

Sharpless So you had tried on medicine a little bit before?

Cates I tried it on a little bit before. Uh, but, I joke around, I mean, at Yale, the science buildings—first of all you had all these labs in the afternoon which got in the way of sports that I wanted to play and stuff, and, uh, I did fine in it. I mean, I probably did better in that than I did in humanities, but it was just way up on the hill and it was cold and a long walk. And I just—I never pursued science after my freshman year where I took chemistry as the requisite distribution science and math, but I at least had those in my background so that when I played with it again, decided to give it a try, had to go back and make up the pre-med sciences which is physics and biochem

and, I mean organic chem, and biology were the three, and you only needed a few courses. So I took those and then applied to med school at the time. And they had to take a gamble on me, luckily they did because I, you know, I took med boards, but I was only like two months through the, some of the requisite sciences, and didn't remember a thing about chemistry. So I'm sure I didn't score very well, but I had sort of an interesting record going into medical school, and so they took a gamble at Yale. I just stayed there.

Sharpless So you were, you were thinking that you wanted to do a greater good, and you wanted to provide an income for this woman you were in love with.

Cates Exactly.

Sharpless Were there other factors that were playing in at that point?

Cates Well, um, it was, it was interesting. One thing that I became involved with in England was the National Abortion Rights Campaign. And, not that I did a lot of campaigning, but I did a little Hyde Parking and, you know, marching at times.

Sharpless Now, this was hot in England at that time.

Cates (speaking at the same time) This was, yeah, it was just going through a lot of the same issues, and it fit very well into my libertarian background as well where, you know, this is a choice.

Sharpless Hands off.

Cates Yes, for individuals to make, and why should, why should the government get involved in that decision? Why should it force someone to continue a pregnancy that they would have otherwise rather terminated? So there was a side of me that was, um, very much into it from a civil libertarian standpoint,

and, and, I remember thinking, there was a period of time where I was thinking, you know, it would be fun to approach this from a medical viewpoint, from a medical having the stature of having a medical degree. Um, I mean, sometimes I'm wondering how much of that is retrospective memory enhancement versus a true motivating factor, um, and I really didn't get involved with it any more, although I did get involved with the family planning stuff at the, at the sort of service delivery level while in med school to do both some outreach programs for low-income populations in New Haven and for, um, my thesis. Also, while I was at Yale Med School, I came back, and I, again because of a Benthamist thing that I was involved with, an interest in public health, and when I got into med school, I had mentioned while I was interviewing that I was interested in public health which was, you know, unheard of in those days, and there was no combined M.D. M.P.H., but Yale was such a, some called soft under-belly school, sort of not a lot of required curricula. All you had to do was pass national boards part one, national boards part two. I'd sort of got used to that life in Cambridge, you know. You'd take one big test at the end. If you pass it, great, if you fail it, you go back like chutes and ladders game and start again. Um, but, and that's the way Yale was. Had a lot of free time. I said, Well, if I use my elective time, especially in the summer between second and third year and then my final two years, could I get a combined—and, and took the required courses in the Department of Public Health—M.D. in public health which it was, could I get a combined M.D. M.P.H., and could I use the thesis that I had to write for Yale—that was the other thing Yale required was that every student

had to write a thesis—could I use my med school thesis as my M.P.H. thesis? So they thought about that awhile, and they said, You know, we might try this. And it worked out to be a godsend because, you know, for four years of med school tuition I got—and one thesis— I got a combined M.D. M.P.H. degree. And, you know, just financially it was, and time wise it was, you know, for a guy who had been sort of trying to stretch out his time all the time, this was my one effort at compressing it.

Sharpless Interesting.

Cates So I did get a combined M.D. M.P.H. while at Yale.

Sharpless What did you write your thesis on?

Cates Oh, on family planning, canvassing in a low-income neighborhood, basically a descriptive study of the efforts that I'd done two summers, uh, within New Haven, and I'd been collecting data in a systematic way in terms of the not very sophisticated, by today's standards, but by the standards of the time, just the mere quantification of those process activities. And then there was the follow—the other thing I had was follow-up information on women to whom we had referred to either Planned Parenthood or New Haven hospital clinics in a way of what did they do, did they come in for family planning, what was their prior method, current method and so on. And what was some attempt at an outcome measure of this process of, you know, well meaning long-haired, you know, white liberals by this time going in to do good in a predominantly African American low-income neighborhood.

Sharpless Now, let me make sure I understand. You worked as an employee of Planned Parenthood—

Cates For one summer.

Sharpless —one summer.

Cates And then I had a—

Sharpless And you were mainly giving out information at that point?

Cates Yes.

Sharpless Were you data—you weren't data gathering while you worked with Planned Parenthood?

Cates I did, I did a little, I did enough chronicling of the activities that I did, that I was able to go back to all the addresses the following year, and then follow-up those individuals. Again, this was before IRBs [International Review Boards] and all this other stuff which would have never allowed me to do this in today's market. But, uh, follow them up by matching records at New Haven Hospital and at Planned Parenthood Clinic as to who had come, who hadn't, what their outcomes were, and then I did a sample of those that I went back and actually tried to locate, and got, had pretty good follow-up of those. But it was just a very simple, descriptive study, but I maneuvered it into a, into a thesis.

Sharpless Um-hm. Now, what about the impact of *Griswold* on—*Griswold* vs. *Connecticut*? Were you able to see that?

Cates Oh, I, definitely. I mean, before that there was no provision of contraception in the state of Connecticut. I mean, it was forbidden by law which was the whole reason for the challenge. And, um, afterwards you could have the formal opening—this being '66 I think that the decision was—by '67, the year that I did, Planned Parenthood itself had, was in full

swing. And, I think in order to jump start its program and get services to those who were perceived as being, having inaccessible services, and a lot of them early on were providing reversible contraception for women whose main method had been sort of postpartum sterilization procedures at the time they delivered their sixth kid, and realizing that, you know, no, at the end of one or two or whatever the number was you could—here, now you, we had oral contraception had just come into being, where, you know, there is just a whole sort of confluence of events that led to, um, led to that being a, an amazing time of—actually, I hadn't even thought about being in the right place at the right time just being in New Haven at the time of the law, with that as an interest, with Planned Parenthood having a job that sort of got me interested in the sexual health arena at the outset, although I'd had a little bit of interest in it, as you, as I said from the libertarian, sort of, abortion reform movement days in England.

Sharpless Okay. Let me turn the tape.

Cates Yep.

Tape 1, side 1, ends; side 2 begins.

Sharpless Okay. What else about your med school days?

Cates Let me see. Um, well, I guess something relevant, I remember I got the M.P.H., and did the thesis on family planning, and the third thing was, you know, choice of a medical career. Um, there is something very enticing about clinical medicine. Here I'd been interested in public health and taking the courses for an M.P. H., but still, you know, liked the problem solving process of medicine and pathophysiology, and found my—I'll never forget, I

started realizing that learning the basic biologic sciences—I never thought it would be as interesting as history. I always thought history was really the, you know, anyway—but, you know, just the whole development of molecular biology at that time, the discovery of DNA, and the implications, and the story behind the discovery of DNA, um, the Watson and Crick stuff. I mean, I was just sitting at the edge of my seat, and we have this professor that was, you know, able to describe it, and it was, it was absolutely fascinating the way the laws of nature fit together in order to produce this hypothesis turned proven, you know, proven fact. Um, so I found myself really liking elements of clinical medicine as a problem solving process. A patient comes in, a client comes in with symptoms, you process those symptoms, you do a differential, you run some lab tests, you do a further differential, you make a diagnosis, you treat. I mean, in each individual client is a problem solving process that was a puzzle. That was, it was sort of fun, and, you know, like most people got consumed by some of the social norm around me at the time which was everybody liking clinical medicine. Having said that, my big question was, Do I follow a definite career love, which would have been sexual and reproductive health and OB/GYN, or do I go into the other field that I like because of its puzzle solving nature, which was internal medicine. Either way, in those days, when you graduated from medical school, you had to do an internship in, most people did internal medicine. You could do it in any of the primary specialties, you could have done it in pediatrics, you could have done it in even surgery. But, um, because you applied for OB/GYN residencies, there was no formal

internship per se. You went from med school to some primary care specialty, to a full specialty residency. That was just the way it was. And so I had, um, one of my real fun mentors in med school was the chair of the Department of OB/GYN, a guy named Nathan Kase, Nate Kase, who is a great steroid endocrinologist, and I got involved in all that sort of thinking through all of the endocrinology, too, as an intellectual exercise more than anything else. So I was balancing that, but decided that go in for my year of internship, go into internal medicine. And I had, you know, by this time, had married my wife who is a Virginian, so we went down to University of Virginia for the year of internal medicine, and I'd applied back to Yale for the OB/GYN residency. I remember getting the call on a Friday from Nate Kase saying, Congratulations, you know, we've selected you to be in this program. Had, you know, millions of applicants. Selected, we're happy. Um, and, but by this time I was thinking I'm not sure I really wanted to do that as a specialty. I was thinking, at the time, I really liked internal medicine, but I also liked public health, and I didn't know quite what I was going to do, and, in those days, there was still the draft of medical students. And so—and I had had an ROTC commitment, an Army commitment from my undergraduate days. So, whereas they had let me off to go to medical school—thank heaven, it got me through the worst of the Vietnam-era even though I was parading in the streets—the point is I was in med school at the time, but then I made, after an agonizing weekend where I, you know, played it, yes, go to, on to residency in which case I would have gone right to residency, delayed four years, and gone into the Army as an OB/GYN, or give myself more time to

think about it, and go into the Army right after that first year of my internal medicine internship. So to make a long story short, I called Yale on the Monday following the Friday and said, "Gee, I'm really sorry. I hate to renege on you," and so on, "but I want to do it early on, let you have, you know, choose someone else, but also let me get on with my life. I may very well apply again after these two years in the Army, but I'm going to go in and use those two years to sort of sort out my life." Um, and, you know, then I completed the year of internal medicine. So, I mean, that, the issue, the third issue in med school I was talking about here was the decision of OB/GYN versus internal medicine, and really what specialty, and internal medicine was probably nothing that I was—as I look back on it—I was ever serious about going into practice, but it was a primary care specialty that I could then go in to preventive medicine which is what I eventually did. So I went—I don't know if you want to have any, delve in anymore to either internship or—but at that point then went into the Army.

Sharpless (speaking at the same time) I'd like to know. Yeah, I'd like to know about the year at UVA.

Cates Well, that was, that was a great year. I moved from, you know, having had all my clinical training as a med student, and most of my life, when you think about it, had been in this narrow northeastern corridor between New York City and New Haven and a suburb of New York City which is about halfway between. And I thought the world revolved around those sixty miles and didn't know anything else. Um, and here I'd, you know, taken this massive leap and married this woman from Richmond, Virginia, and then now was

finally getting ready to go outside that narrow northeastern corridor. Oh, you know what I forgot to mention was, um, while I was in med school, another influence on my life was a person named Phil Sarrel who was in the OB/GYN department, but it was just developing a sexuality program and a sexuality education program for Yale undergraduates, and—now that I, it's interesting I forgot about that, but now that I think about it, I was a student leader in med school at the time, and one of the things I did from, was to participate as one of probably ten medical school students, um, in the sexuality education sort of being a trainer for undergrads learning about sexual choices, contraception, STIs [sexually transmitted infections], the whole bit, and actually working to prescribe contraceptives, again an off of the Griswold case, to Yale undergraduates. This was now late, the years of 1970-71 in New Haven. And, um, it was that program, that working with Phil, that there was four students from different medical schools were part of a Macy Foundation grant, um, and one of my summers was really tough duty where I was actually taking a clinical clerkship in London, but I got paid to go and study the teaching of human sexuality in European medical schools, and then give a report back to Yale on a Macy Foundation grant. And, as part of that foundation grant, we all had tough duty meeting in Williamsburg, Virginia, and it was there that I met Carl Tyler and Bob Hatcher were two—this was like 1969 now, 1970—and they were young people having just started the CDC [Centers for Disease Control and Prevention] together, and through the EIS, the Emory the family planning program together. And I just had a wonderful conversation through this two

day meeting with Carl, and he was, of course, trying to recruit me to CDC at the time, and I tried to do that, but the Army wouldn't let me out of my obligation which is why when I left UVA to go into the Army, I had to go into the Army. I couldn't use the public health service as my way of getting, uh, the sort of draft obligation out of the way.

Sharpless Right, right.

Cates But there was that meeting of Carl had lingered with me, and Bob had lingered with me as really a neat step to take in my career hoping that I could talk the Army into letting me do that, but no such luck. I mean, I, when I left my internship in, at the end of June in '72, I went right into the Army, but because I had had my M.P.H., the Army said, Ah, we don't need you as just a primary general medical officer seeing everybody's cough and other problems, routine problems. What we want you to do is be a preventive medicine, uh, officer, PMO it was called. And I said, "Okay, great. Let me use that opportunity." And this was 1972 now, and the Vietnam War was still going on. So all of us who went into the Army, went to a general medical program, but then those who were preventive medicine offerers went down for three months at Fort Sam Houston. There were twenty-five in my class. It was really sort of a fun class in which you got general epi and a bunch of different training to prepare yourself for what you had to do out in the field, noise hazard evaluations and inspections of—

Sharpless (speaking at the same time) Yeah. You'd had a little bit of epidemiology before then?

Cates Well, I got my M.P.H. before that. So I'd had epi and, you know, maternal—

I had a general public health course. So I got more infectious disease epi. I got, um, you know, continued type of stuff. It was more topic matter because if you were PMO in the Army you had to check the water quality, you had to, you know, inspect the dining facilities, not formally called mess halls, um, you had to conduct noise hazard evaluations of the tanks and so on. I mean, it was a catch-all, a grab bag, and then you were coalition for the traditional public health clinics of, at the time, venereal disease is what it was called, um, immunization, TB, rabies, I mean, the traditional sort of public health responsibilities that a local public health group would do even today. But I was the supervisor of the clinic that saw people with syphilis and gonorrhea. I was the supervisor of the clinic that gave immunizations to kids. I was the supervisor—it's, we had, so I had some—

Sharpless (speaking at the same time) It was a broad spectrum

Cates Broad spectrum public health in Nuremberg.

Sharpless And you were in Nuremberg.

Cates Oh, well, you're right. This is another really interesting—

Sharpless Okay, so you started at Fort Sam for training.

Cates started—good! Boy you, Rebecca, you're amazing at following this. So I went down to Fort Sam for—San Antonio, another wonderful city that I'd never knew existed until I got stationed there, and boy, we had just—you know, coming out of internship, it was like a three month paid vacation, I mean, to go to classes for about six, six hours a day and hang by the pool for the rest of it. Meanwhile, we'd had our first child, and she was dying in the San Antonio sun, but apart from that it was, you know, that's why we were

around the pool a lot of the time. So anyway, when it came to get time to get your assignments, and everybody—it's like internship matching—everybody gets this envelope, and you sort of open it, you know, shaking like mad because, I think it was like twenty out of the twenty-five of my classmates were assigned to Vietnam. And I opened mine, and we had decided that we were going to put down for some of the more undesirable locations in the States just to not have to go to Vietnam, and I, but I, you know, said on my green sheet I wouldn't mind going to Europe. And the only way you can get to Europe in those days was to commit for three years which I just wasn't willing to do at the time, I didn't. So I opened it up, and it said Nuremberg Germany. And I said, "Oh, whoa, this is great on one hand, but I didn't commit for three years. There must be some mistake." So when I went in to the place, There's no mistake, you're in Nuremberg for two years. I said, "Whoa, that's fantastic." So after Fort Sam, went over to Germany and was, I mean, it was the ideal way to cut your teeth in preventive medicine because, um, here you have this, in epi terms, this captive population of American servicemen that you were serving in this regional medical structure. I was stationed at the Nuremberg Hospital which is the central hospital for anyone who got sick in one of, oh, probably ten outlying barracks type places within Northern Bavaria, and then they all fed like spokes in a wheel into the 130th General Hospital. And, you know, I did, it was at that time, I did no contraception at all, I did no family planning, but I did do VD [venereal disease] and general public health. So that was one way of introducing me to, you know, to the sort of sexually transmitted

infections arena.

Sharpless And how big a problem were they among the GIs?

Cates Um, well, you know, among any military people who are stationed there was a sex worker population in Nuremberg, and most, but not all of the STIs were traced to the wall as it was called, which would be the place where you got your sex work. Um, and we had clinics two days a week, and for people who had symptoms you could just walked in, got diagnosed, and got treated on the spot, I mean, there was no waiting. But—

Sharpless And most of them responded readily to treatment.

Cates Yes. It was just beginning to be some people, but not in Germany were bringing back to the States resistant strains of gonorrhea from Vietnam, but that really hadn't made it—the regulations had made it to, um, to Nuremberg, but the, luckily, the organism hadn't. So, but a couple of interesting things in that regard in Nuremberg. Number one, the big problem we were having was with drug use, and intravenous drug use, and, you know, just the boredom of people who are winding down from Vietnam, and young people over there. And so they had access to heroine and were shooting up, and we had a massive epidemic of hepatitis B and our hospital wards were gradually filling up, and it was all thought to be due to drug use. So I decided to do a case control study of hepatitis B, non-hepatitis B patients, and lo and behold not only did I find that, sure, you know, big deal, we knew that drug use was associated with—oh, the other thing that was just coming out was the hepatitis B antigen. So we were able to characterize these people not from the standpoint of serum hepatitis and

infectious hepatitis without any marker, but from hepatitis B versus hepatitis A which was just becoming formed. And, and I did a case control study, and I found that in the hepatitis B population, not only was injecting drug use associated with higher risks of hepatitis B, but so was smoking cannabis, and it was thought that in these circles was smoking cannabis a proxy for unadmitted intravenous drug use, and it could have been, but was smoking cannabis also a way of getting minimal, but some body fluids containing hepatitis B spread within a circle as you were smoking a pipe or sharing a pipe or some other thing.

Sharpless Spread through the saliva.

Cates Exactly. And, or it turns out it spread through the transmucosal exidate that you measure in saliva. But we were the first to describe that and actually wrote an article in *JAMA* [*Journal of the American Medical Association*] out of that Nuremberg experience on hepatitis B, its increase, and what, and then the case control study the one thing that it might have been. And so I actually had published when I got to the CDC. Anyway, so now I'm in Nuremberg, and I'm doing all this fun public health stuff, and, you know, as I say it, just a marvelous time. I mean, I had, you know, these two, now two two- year sojourns to Europe, one in Cambridge for between undergraduate and med school, and then now in Nuremberg, Germany between internship and eventual residency which turned out to be CDC. But while I was over there, I just, I loved public health, and I wondered—but I didn't know much about CDC. Yale was really, Yale was much more NIH [National Institutes of Health] oriented than CDC. So I didn't get much orientation as to what

was possible at CDC. So I was looking around, and I, literally, said, "You know, I love preventive medicine, but maybe it would be better if I went back and completed my internal medicine training, but I'll see what else is"—and I was looking for the preventive medicine residencies, and lo and behold CDC had one. So I said, You know, what I'm going to do is interview at Emory [Emory University] for an internal medicine job and interview at CDC for a preventive medicine residency, and I'll just see what I like best. So I flew to Atlanta, I forgot the, anyway, late '73, early '74, and spent a day interviewing at Grady Hospital at Emory, and boy it was like night and day difference from UVA, because, you know, UVA is, you know, relic. It's still like, I mean, a good tertiary care hospital, but not an inner city hospital by any means. I mean, you know, referrals from Danville, Virginia and Roanoke were not, you know, inner city knife stabbings and gun wounds and well, I, I mean, as I was going through the ER of Grady, I saw more pathology there than I had ever seen at, it seemed like in, you know, in half a day acute, you know, I had one diabetic ketoacidosis that was crashing, another gun wound, I mean, and so on. That was just much more hectic than it ever was at UVA, and I, I got a little nervous. But then I went up to CDC the next day and was interviewing for the preventive medicine residency, and they came to me and said, Don't you realize there's no such thing as a direct entry into the preventive medicine residency? That, in fact, the only way to get in is to apply and get in to the EIS [Epidemic Intelligence Service], and then at the end of your first year of the EIS, you could get into the preventive medicine residency. And I said, "Hm. What's

the EIS?" (laughter) I just didn't know about.

Sharpless Yeah, yeah.

Cates And so they, you know, I was basically told about it, and I was very enthusiastic and, you know, not—and applied for it on the spot. I said, "Well, could this interview for the"— what I thought was a PMR—"apply for the EIS?" And they said, Oh, sure. And so then I applied for that, and then within a week got back to Germany and received notification that I had gotten in, and then, you know, my life was set at least for the next two years.

Sharpless You knew you'd be going to Atlanta.

Cates I knew I was going to be going into preventive medicine in this, you know, post-doctoral program in applied epidemiology at CDC, and I was, you know, at the time, then I got to reading the *MMWR* [*Morbidity and Mortality Weekly Report*]. I was reading a little bit before then, but I got to, slowly but surely, while in Nuremberg, know more about CDC as the pivotal agency for public health.

Sharpless You were reading *MMWR*?

Cates And I'm reading *MMWR* at the time, and even contributed to it a case of diphenylhydantoin toxicity in military aviators, a rabies, a way to treat rabies in pregnant women, and lastly, a, this case control study of hepatitis B in Nuremberg, all of which I submitted as an outsider to the *MMWR*, and it all went in. And of course they loved it that this guy was applying who'd already done all this public health field work equivalent really to being an EIS officer in the state like Roger [Rochat] was initially. And then, but yet was coming back in to CDC. So, you know, we finished the Army, I become persona

non grata, story of my life in the Army because I published this article in *JAMA*, part of which documented this massive rise in hepatitis B ascribed to intravenous drug use at a time when the Army was trying to keep this relatively pure image in the Vietnam-era. So anyway, I was kind of on the Army's hit list for a while.

Sharpless Before we go on to CDC, can I ask you one question?

Cates (speaking at the same time) Yeah, sure.

Sharpless Now, you have been a prolific publisher all of your career. How did you get started doing it so early?

Cates I don't know. I just, um, I like, I find that writing helps me crystallize my thoughts and makes my fuzzy thinking more, uh, gives it borders and shape, and also allows me to sort of provide a structured rationale for putting data together to come up with conclusions. And I—it's just something I enjoy. I get, you know, a certain high out of analyzing data. It's always a high to get a manuscript accepted for publication, um, and I just, you know, it was a stage in my life where it was expected and it was something I enjoy doing which is just sending it in, having it critiqued by outside reviewers, learning from that outside critique experience, and then hopefully having manuscripts that were worthy enough that they'd ultimately get accepted and contribute to the, you know, array of knowledge that has become the traditional, uh, traditional base of knowledge of medical science. So I just, I, it's just something I always liked doing. And seemed like to me like it was just the inevitable endpoint of collecting data. I mean, why do you want to ever collect it, not to have it sit, why not publish it and then—which was the real fun of CDC,

and we get to have it on the next tape—the epidemiology teaching at CDC, and why CDC was so unique. It wasn't just forming hypothesis, just collecting data, just getting it published. All that's necessary, but not sufficient. But it was the who, what, when, where, and why of epi, but at CDC it was also the so what, in other words, how do you apply the inferences that you draw from that particular analysis, and then how much, how much does it cost and what type of trade offs are involved in making public health decisions about the findings that you have.

Sharpless Okay. Let's change the tape.

Tape 1 ends; tape 2, side 1, begins.

Cates Where are we? You—

Sharpless We're starting at CDC.

Cates Okay.

Sharpless (speaking at the same time) Okay. This is the second tape with Dr. Willard Cates on May the twenty-fifth. Okay, so you've been in Germany, you've deci—now, how did you decide to go ahead and take the residency at the CDC as opposed to taking the internal medicine one at Emory?

Cates Well, again, I loved my day at CDC, the people I talked with, the things they were doing, the outbreaks they were investigating, (knocking) the surveillance systems they were developing, all of the issues that I had wrestled with as a public health officer in Nuremberg were at a national level, what CDC was doing. Plus, I also felt I was just scraping the surface of the science of epidemiology, and I really needed and wanted and loved it, and needed more time getting trained in that science and the application of

that science, and felt once I stumbled across the EIS, though I should have known more about it, in retrospect, given Carl's having talked to me about it earlier. I just hadn't really thought of it as the next step.

Sharpless Now, I'm sorry I don't know this, I should, was Doctor Langmuir still alive?

Cates Doctor Langmuir was still alive, but he had stepped down from CDC around 1970, and Phil Brachman had taken over as head of the epidemiology training office which was the EIS. And then Carl's branch was one of the divisions.

Sharpless Family planning evaluation, yeah.

Cates Exactly. So anyway, I applied to the EIS, got accepted, and, um, went back to Atlanta for the very famous weekend match system. And EIS conference is the week beforehand, and then the match during that weekend. And I didn't really know what I wanted to do at CDC. I'd had fun doing hepatitis outbreaks, so I looked at the various hepatitis positions of which there were some in Atlanta and some in Phoenix, Arizona where the Hepatitis Branch was at the time. I liked family planning from my thesis work in med school and just general interests, and so I, sort of—and from my meeting of Carl, and have looked at the available positions within the family planning group, and, actually, was most mesmerized by a paper given by a young colleague who was taking a year away from CDC to get his M.P.H. at Harvard, but during his EIS time—his name was Howard Ory—during his EIS time, he had done work on oral contraceptives and ovarian cancer. And he gave just a brilliant case control study at the EIS conference, and had also a position in the EIS open, and after looking at them all and talking to everybody, I said,

"This is the guy I want to work with, Howard." And then, I'd been talking with Carl, and he was trying, Carl was actually trying to talk me into the abortion surveillance position because he, uh, sort of had things all worked out where people would be, I thought. I thought that's what he was—and, but then it turned out that somebody—anyway, to make a long story short, you put down your preferences one through ten; they put down their preferences one through ten, and then they sat in the back room and tried to get the highest match. It wasn't computerized matching, it was just back room, good-old-boy matching. And, and so you turned this in, and then waited the next day, and by the middle of the afternoon, they read out where you were assigned. And I had listed this contraceptive epi group as my first because I wanted to work with Howard, and they read off my name, and I got, um, I was assigned to the Abortion Surveillance Branch which had—I had listed, but I didn't list nearly as high, and I'd written a long why, and I was almost sure that was going to be my first choice. Well, it turned out that what had happened was that there was one person in my class that was very hard to match, and in order to allow him to get one of—they always prided themselves on everybody getting among their top three to five choices—the only one that he wasn't, um, you know, totally outvoted for was this contraceptive one. So that then bumped me down to a lower choice, and I was very disappointed. I remember when my match was read out, and Carl was trying to come up to me to congratulate me, and I was just really pissed off. So, um, I just went sort of stomping away back to Nuremberg all sulking. But just like other things in life, it turned out to be a goldmine. You

know, I adapted very soon, a couple days later thought, What a neat opportunity and so on, and then came back and worked in it. And it did turn out—through a fluke, I mean, it wasn't my first choice at all, but through a fluke—to be the best assignment any one could have had, I mean, *Roe* v. *Wade* had just occurred. You know, Jack [Smith] and Judith Rooks and others had just put in a surveillance system. Carl had just negotiated for, with the Population Council, to take over this large cohort study called JPSA [Joint Program for the Study of Abortion]. Um, it was—Carl wanted to take over and develop a mortality surveillance system which really became one of the things that I actually was responsible for and created at CDC, an abortion mortality surveillance system. And, you know, just having all of this amazing opportunity to examine as an epidemiologist a, an event, if you want to think of it, that was a true public policy landmark event of our time. Forget the legal policy, forget the women's right side of, forget all of the, um, you know, even more important aspects of *Roe* v. *Wade,* for this young burgeoning epidemiologist, it was this phenomenal policy intervention that, using the traditional tools of public health, looking at morbidity, complications from abortion, looking at mortality, deaths from abortion. You could chronicle the public health impact of this 1973 intervention on the health of American women, and you could also examine a surgical procedure, applying the tools of epidemiology in an ideologic sense as to something that had never been studied because it was illegal, you know, study injection drug use techniques, I mean, because it's illegal. So you couldn't study illegal abortion, but it had become out of the closet into the

measurable arena, and there were all these myths attached to it that somebody who didn't know anything about it could go in and collect data and say, Well, this myth happens to be supported by evidence, this myth isn't, and throw it out and get on with it. And, and then so I started working in the Abortion Surveillance Branch, and then another wonderful thing happened where—and I had great colleagues there, and I was cross-talking with Howard and getting a lot of his methodologic expertise, met Roger, who I'd not known beforehand, in fact, he had been at Princeton getting his graduate degree, coming back to CDC to be the deputy, um, to Carl, and Leo was, had come back after getting his Ph.D. and was just starting the program, what is now the Program Services Branch. So you had Howard in contraceptive epi. You had me, a first year person, in the abortion surveillance, mentored for my first year with a psychiatrist named Win Burr, who later went out to Harvard to be a professor of psychiatry at Harvard, but then by my second year where I was acting branch chief, because there was only two of us, the second year was a branch chief by definition, um, and Jack Smith doing all the hard work of collecting the descriptive statistics around this event. And that was just plopped in our laps to evaluate. But by the second year, the guy who matched in the Abortion Surveillance Branch loved abortion as a, as a really career, and was one of the brightest people I'd ever worked with, had gone through two years of, had gone to med school here in Chapel Hill, gone through two years of OB/GYN training at Chapel Hill, took a break between his first two years of OB/GYN training and his last two years to come to CDC to be an EIS officer because of his public

health interests, named David Grimes, and a total quirk. And then a third person had joined the abortion team as the statistician working for Jack, another person who was out of the Midwest, worked for NIOSH [National Institute for Occupational Safety and Health] for awhile, and then decided he wanted to try Atlanta, and hooked on with the Family Planning Branch, and that was Ken Schulz, and, you know, to make a long story short, you probably know, the three of us who formed the sort of abortion surveillance scientific team had a lifetime career together, first of all in family planning, then in STD [sexually transmitted diseases], and now at FHI [Family Health International]. So I've, I mean, that's been just a wonderful saga of three very different, very different, but very close friends. Very different in terms of one's personalities, very different in terms of one's skills, and very different in terms of one's, really, approach to etiologic reasoning. But none the less just formed this great team with, that was synergy in its true definition of a team working together, and probably was more effective working as that team of three in those heydays, where you had just data rolling out left and right, than we ever are in a larger, more balkanized environment of a large organization.

Sharpless Now, the three of you have been working together for more than thirty years.

Cates Yes.

Sharpless Say a little bit about those two, a little more about those two individuals if you would.

Cates Sure. Um, well, let's start with the statistician, Ken. He comes from a

Chicago suburb, went to school at Western Michigan where he was a business major because the business school had the main statistics there, and got, and also I think got his master's in statistics at there. Then, in an attempt to avoid going to Canada, got into the public health service in NIOSH, the National Institute for Occupational Safety and Health in Cincinnati, was part of the public health service, was looking around for jobs. There was this opening that Jack Smith had. And so he arrives in Atlanta the summer of '74, the same time I arrive. And he is assigned to manage, clean up, be the statistician for this large database we had just inherited from, um, the Population Council, called the Joint Program for the Study of Abortion which was, at the time, the largest cohort study—initially in New York City, but then expanded to the rest of the nation—of legal abortion services, women who get them, the procedures used, the complications thereafter, and so on. So we took over that, and Ken took over the primary statistical responsibility for that, and I took over initially, and then David and I eventually, the primary epidemiologic medical responsibility within this large database, just asking about the relative safety of local versus general anesthesia, the relative safety of dilatation, the relative safety—and, what, anyway, a bunch of different things spun off of that that I'll get to later. But Ken was the statistician, and he was the guy—I used to joke, doesn't do it quite so much anymore now that he's into randomization and experimental, but every time you'd ask Ken a question, he'd say, Well, you know, the probability with a bell-shaped—he'd draw you a bell-shaped curve! (laughter) And I'd ask him, What, you know, what did you have for lunch. (laughter)

Well, the probability of what I was going to order, you know. And so, anyway, he was easily the more methodologic and quantitative one. And then David came into the group a year later, but full of clinical knowledge. He'd done abortions, he'd trained in OB/GYN, he wrote brilliantly. He was the first person I ever supervised, and it spoiled me because I thought everybody wrote first drafts like that. I mean, David's first drafts just get submitted. I mean, they're just, you learn from them. He writes and speaks brilliantly. Um, but David is a surgeon. So Ken is the statistician always trying to figure out what does all this, these data sort of mean; David draws inferences very quickly the way a surgeon does, and sort of draws them in stark terms—I joke around, zero or a hundred percent reasoning. "Yes, this causes it, let's do it, that's right, cut it out right now." And I'm the epidemiologist in the crowd, and I'm, Well, it could be this. I sort of, you know, depending on the hour you ask me is depends on. Fifty-one percent, forty-nine percent reasoning versus the zero or a hundred, and the bell-shaped curve guy. So, I mean, we were a, you know, a wonderful team, close friends, our families were close friends too, I mean, we palled around a lot, drank a lot of Friday night gin and tonics and this type of stuff. Turns out Ken and his first wife, who were very close friends, uh, in those early years in Atlanta, they've actually split up not having kids, whole 'nother story in itself. But, um, but David and Kathy had children who were like, two girls who were like two years ahead of my girls, and so the four baby women, Grimeses and Cateses, played together, and grew up, and imprinted. And, in fact, one of my girls went to Duke down the road, mostly because Robin Grimes had gone to

Duke who she just idolized. So, I mean, so I mean it's a close knit story that way. Um, what can I say? So those are two close colleagues. We first joined together in the mid-seventies, and now are, you know, colleagues, leaders at FHI. I'm, you know, the president, Ken's the vice-president for quantitative sciences, and David's the vice-president for medical sciences. So we're here, and in between, we had a stint in the STD/HIV division [of CDC] together as well. So, I mean, and, you know, I like to think that we just have such a great working relationship that I'm such a smooth talker that I get them into my group, you know, but it, you know, it's real career opportunities for them as well, and, in fact, both of them are off now on the West Coast, David and Ken. They do three courses a year, teaching applied—well, just teaching epidemiologic and methodologic principles to junior OB/GYN faculty and OB/GYN chief residents who compete for the right to go to this Berlex Foundation-sponsored course. And that's where they are this week. We would have been in Ken's office if Gary's office hadn't been available.

Sharpless Okay.

Cates Which is two doors down.

Sharpless Thank you for that very much, but to circle back to 1974. Okay, abortion surveillance, what do you do?

Cates (speaking at the same time) Right. Well, that's a good question. I mean, if, you know, we were—

Sharpless Where do you start?

Cates —we were collecting statistics, and, you know, I had a lot of this handed to me. I mean, I really, I wish I could claim that I did any of the creative

thinking of this. But if you think of abortion surveillance at CDC at the time I got there, there were three key databases that really formed the basis of what we did. There was what I called the denominator database that Jack had created, and was already in place and moving in terms of getting data from the states, collating it about the number of women who obtained legally induced abortion, how old they were, what race they were, what marital status they were, when in the gestation they got it, what type of procedure was used. I mean, all of the, just the denominator, all women who got it. Now, was, were all women who got it reported? No, but then the Alan Guttmacher Institute had its own database that it was collecting with a guy named Christopher Tietze out of the Population Council, another huge mentor for all three of us. I mean, he was a just an ancient guy with a long white beard. He was a mentor for Jack, he was a mentor for me, he was a mentor for David, and we'd just go up and spend hours sitting at his feet, and he would pick apart all of our papers more than anybody at CDC. But at any rate, that's that. But so you had the denominator database of women obtaining abortions. You had the numerator database that we'd also inherited from Chris, um, which was the JPSA, which is a cohort study of specific facilities and the procedures that they did that we collected on a standardized form, and looked among the different ways of performing abortions as to what was the safest in terms of the lowest level of complications. And then we had—we didn't have in place, Chris had done some work on deaths in, from the New York State registry, but we didn't have a national registry of abortion deaths going. And, together with Jack, I,

actually, that was my assignment. My first assignment as an EIS officer was to create one. Oh, how do you do this? But then Jack sort of guided me through it. You go to the vital records, you create a, um, a CDC registry, you send out letters to OB/GYNs, you send out letters to pathologists, you send out lett—anytime there is anything that happens that you suspect a woman may have had an abortion that was associated with her death, report it to CDC. I mean, it was active surveillance for about a year to try and get it, based largely on vital records, and there weren't that many of them. There were maybe, you know, fifty or sixty a year. So, actually, each one of them I individually investigated, largely over the phone rather than going out on an outbreak investigation and all. But collecting the records, analyzing it, was abortion truly related, write it up in a little summary. And that was the third leg of the—you have the numerator data, morbidity, mortality; the denominator data, women who got them, and you put those all together and you got a pretty good picture of a procedure that was an important public health policy moving from illegal and unsafe to legal and safer, and then during the decade of the seventies when it was legal and able to be studied, became even safer by virtue of the types of data that we were collecting and the reports we were putting out. So, you know, most people think of the remarkable record of the 1970s for legal abortion as being simply a bringing abortion as a back alley procedure from the back alley to the facilities, but the first couple of years, it really wasn't all that safe. People were doing it by sharp curettage, people were doing it by the installation procedure. Probably the biggest scientific major breakthrough that I have ever been involved with

was a paper that David was the first author on out of JPSA published in *New England Journal* in 1976 which looked at what is now called to some partial-birth abortion, but it was earlier in gestation that you could actually empty the uterus from below, and it was safer than what was existing, the existing standard of care for abortion which was based a bit on the trimester theory that if a woman came in and was twelve weeks, you could do a suction, uh, you could go from below—the other thing we did was look at sharp versus suction, suction was much safer—but then you could do a suction abortion from below. And then if she was for some reason twelve weeks and one day, or, you know, into her thirteenth week, her uterus did not allow emptying from below anymore and you had to postpone her literally for a month, and then admit her to a hospital and do an injection, an amniocentesis procedure in which you'd inject a solution that would cause a mini-labor and, after ten to twenty-four hours, the woman would spit out, at that point, a recognizable fetus, tiny, but recognizable. And that would be the way, it was the safest way to terminate because it was just not—there had been a couple of episodes where at thirteen, fourteen, fifteen weeks people had tried to empty from below, and there'd been the anecdote of the perforated uterus, and the horrendioma. And it's the horrendiomas that then drive clinical care because everybody remembers it, I'm not going in that, better do the amniocentesis.

Sharpless What's horrendioma?

Cates That meant a bad thing happened. A woman would die, she'd get an infection.

Sharpless (speaking at the same time) Okay, oh, okay. A bad outcome.

Cates (speaking at the same time) Uh, yeah. A bad outcome. A horrendous outcome, a horrendioma, in medical terms. That, I mean, it's just jargon. That is there, but, um, so, and it was that anecdote that would—but what we found by looking at the JPSA data through those uteruses that were either intentionally or unintentionally emptied at thirteen, fourteen weeks and then fifteen, sixteen weeks that, in fact, the complications we were measuring were several fold lower than the complications we were getting from the amniocentesis that was the byproduct of telling a woman to delay. So, plus you had this horrible time of the woman who had made the decision was being told just wait awhile. I mean, and it was horrible for her in a sense because she was going through a mini-labor, many times was young, it was young women who would delay the longest, and her first experience with a pregnancy termination procedure was having this small—and who knows what, you know, what types of adaptive mechanisms and psychologic sequelae that procedure—so we published these data, and it was interesting. Carl didn't believe it because standard OB/GYNs were talking don't empty from below after twelve weeks. And, you know, I didn't know a thing about it, I mean, I was this internist. I'd never done an abortion, I never knew what I was doing, but I could look at data and I could see comparative statistics. And David became convinced immediately that these data were real and, you know, presented them in a variety of arenas, was, you know, had tomatoes thrown at him by the traditional OBs. Lo and behold, we published it in *New England Journal*, people tried it. They slowly inched up their threshold for

emptying from below, and, you know, over a remarkably short period of time, in part because there were so few clinicians that were really doing abortions, but we got an entire medical profession to change its way. And so that these amniocentesis abortions that were forming 10 percent or 15 percent of all procedures in 1974 became 1 to 2 percent of procedures by the time we left that branch in the early eighties.

Sharpless You were able to see an almost immediate impact of your data.

Cates Absolutely, and, I mean, that was so gratifying. And, you know, it had its consequences. It transferred the onus of the pregnancy termination from the woman, who was sitting here going through labor, expelling the fetus frequently between her legs, having to call a nurse with the fetus lying there. I mean, it was just really barbaric when you think about it. But then you take the clinician who now is emptying from below, great woman is protected of it. I mean, not a lot different than the standard suction curettage from her side of the table, but from the clinician's side of the table, you're yanking out this stuff, sometimes having to, you know, pull recognizable fetal tissue, and the trauma is transferred from the woman to the clinician. Now, that created its own psychologic morbidity on clinicians themselves, and led, as people inched further and further, further up with realizing that you could empty from below to the very real issue of today which is the partial-birth removal from below, uh, which is now banned by federal law. So it's interesting to see the evolution of this procedure which came from a good thing to possibly, from the standpoint of a woman, still a good thing, but one that is just unacceptable to the mainstream America when portrayed as this yanking

out and dismembering and so on of a fetus, even though the only time it's usually done now is for the extreme cases. The less than really point two, point three percent of all cases where a woman is diagnosed through amniocentesis with a fetal abnormality or a real, real young woman just denies that she's pregnant until the, past the twenty weeks and is found to be pregnant, and the decision from all parties is that it's better for her and society to terminate the pregnancy rather than continue it. So, anyway, that was the real fun thing that this database allowed us to do.

Sharpless Let me turn the tape.

Cates Sure.

Tape 2, side 1, ends; side 2 begins.

Sharpless Those things you were talking about with the recognizable fetuses and the traumas and things like that are really fascinating. Um, in the early seventies there when *Roe* v. *Wade* was just becoming legal, um, what was the—what kind of attitudes were you encountering when you told people what you did for a living?

Cates Well, that was interesting. I always joked that, that, you know, my mom always told people I was a teacher in Atlanta. (Sharpless laughs) But the—you know, I mean, it was sensitive. Um, there were some people who really felt uncomfortable talking about it. My family, my godmother was one of the more impressive people I've ever met, is a, or was a Roman Catholic, is a Roman Catholic who had six kids, didn't believe in abortion, and we'd go through these wonderfully respectful discussions of what were the data showing, what should a woman have the right to do, what was, uh, moral or

immoral, and so on. And occasionally we'd run into very staunch anti-abortion people who would, you know, would try to disrupt our, even our scientific presentations because they didn't like the direction the data were going. There were—I mean, it wasn't like the data were all in one direction, and, in general, from a public health stance, simply because terminating a pregnancy was so much safer even though it got more dangerous with each week that went on of pregnancy, so it was safer earlier than later, even later through sixteen weeks it was safer than continuing the pregnancy to term. So the other thing we all—

Sharpless Safer for the mother.

Cates For the woman, right. Um, I mean, clearly terminating a pregnancy is not safer for the fetus if you consider that a life, and from that standpoint it's not at all. But that's a judgment call that—it's a fact, it's not safer for the fetus, and it gets down to the very heart of what is the choice available to the pregnant woman versus the rights of the, um—and some, including me, would say the accumulating vested rights of the growing fetus to be infant at a time when medical technology is allowing those infants to be able to live at younger ages. Where is that trade off in which, in which abortion—the right of the woman to terminate is superseded by the right of the infant to live outside the womb. And we still don't have answers to that, but it is the murky area that my public health data aren't going to answer. But public health data are going to tell from the standpoint of society and women's deaths, or women's complications is it safer to terminate than to continue a pregnancy from her viewpoint. And that's really what I was charged to do,

what we were charged to do as stewards of public health data at CDC.

Sharpless And the law of the land was that abortion was legal.

Cates Exactly. That the woman had that choice, and—

Sharpless That wasn't your decision to make.

Cates No, no, no. It was our responsibility to measure its effects, but the Supreme Court had ruled that the woman had that right to privacy that the state could not intervene until it had a legitimate interest in protecting the health of the developing infant that would then live outside the womb—which again is the legal basis for the partial-birth laws. But having said that, our responsibility was to measure its effect. Now, a couple of things we also found through these combinations of denominator and numerator data. We saw, um, we documented the gradual safety of legal abortion as procedures got safer and safer and people got more experience with them. The learning curve made people better at their surgical procedure. So as a surgical procedure, we have learned more about induced abortion than any other surgical procedure. As a public health intervention, we learned, not surprisingly when you think about it, but intuitively this isn't the way some think, that we saw that deaths to women go down radically without really much impact on births. So the modeling of this event showed that the legalization of abortion tended not to substitute abortions for pregnancies that would otherwise be continued to term, it substituted legal abortion for pregnancies that would have been otherwise terminated illegally. So it had a public health impact, if you see what I mean, on deaths and complications, but it didn't have a demographic impact on births. Now, again, people who

are opposed to abortion think that making it illegal will somehow save babies. It—what we found is at the population level, it will do some, maybe ten percent of women will choose to continue pregnancies they otherwise would have terminated, but 90 percent of women will just terminate those pregnancies in less safe circumstances. And the data are really clear on it. So that's a public health fact, an epidemiologic fact that has to be taken into consideration when people are confronting whether to restrict access to safe abortion. You're really not going to be saving these babies, you're going to be putting the women at greater danger. It's an interesting, and to some a commonsensical reality when you think about it, but to others intuitively they still think that by preventing a woman from terminating the pregnancy they're going to ensure that that pregnancy continues to term.

Sharpless Now, women have always had abortions.

Cates Yeah. Now, we—and we did a couple of other studies that would confirm that through smaller, uh, smaller follow-up studies where we were looking at, we had a database at Grady Hospital of women who were denied abortion through their—Grady had a review committee for awhile and you had to apply to it, and some women—largely because they were so late, and Grady didn't do anything beyond twelve weeks—were denied abortion. And the question is what happened to them. Well, we followed those women who were denied ABs and showed that the bulk of them, again, terminated their pregna—either went out of state to later legal abortions, but a really small percentage, less than, I think, around 20 percent continued those pregnancies to term even though denied at a later stage the termination. So I

mean, again, it's not as if you're going to save babies. Anyway, so that was really, you know, those 1970s were a very exciting time. The other thing that we saw was that pregnancies terminated—there was—among the old-timers they would say safe, in hospital, abortions like it was almost like if you would do these procedures in a hospital they became safe. And yet this whole industry sprung up, the outpatient abortion facilities, and through JPSA we just showed that, in fact, it was safer to have those abortions in these specialized facilities than it was in a hospital where you were—it was a cumbersome procedure, it was much more costly, it—and it was no safer because you didn't have people who were really skilled. They'd be doing one a week as their private physician rather than twenty a day where you really had a systematic, streamlined backup system and were familiar with what were the, uh, best way to do the surgery and then what were the anticipated complications.

Sharpless Interesting. What happened when the Hyde Amendment passed?

Cates Well, this is good. That's another issue that was really fun to use public health data to analyze, and this was when the federal government restricted the use of federal funds to pay for Medicaid abortions called the Hyde Amendment. And so we set up a couple of—you know, as we were charged to do—policy studies looking at databases in different states, those that had adopted the Hyde Amendment, those that had provided state funds, those that didn't provide state funds, and actually found that, in fact, what the Hyde Amendment did—it wasn't like it would dissuade women, many women, from—there are a couple of very famous anecdotes where women,

where a woman died when she didn't, uh, went to an illegal abortion when she didn't have funds for a legal abortion in Texas.

Sharpless Isn't that in McAllen, right?

Cates Yeah, yeah, in McAllen, Texas. The Rosie Case it was. A whole book was written on it. That's when I got to know Frances [Kissling] really well. But in general, low-income women denied funds from the public arena for abortion were very ingenious. They would either find private funds in order to pay for those procedures or would go to abortion providers who would advance them money, give them credit, terminate their pregnancy, and they would then pay back the abortion providers. So 90 percent of women or so, based on just the modeling that came out of this, obtained procedures—legally induced procedures—safely. And the predicted—we had done some previous modeling of the Hyde Amendment what would have happened if every woman had obtained an unsafe abortion. It never came to pass, there were some anecdotes, high profile anecdotes, but, in general, what the federal government did was transfer, mostly to the states, the states that were doing the most abortions were also those states that elected to use hundred percent of federal funds. You need us to stop here?

Sharpless No, no. It's okay. I was just thinking, you were talking about anecdotes and myths and things like that. To what extent do you think you were able to change people's minds with your data given the number of myths and anecdotes that were out there?

Cates Well, I think there are two mindsets. One is a medical mindset that just had absorbed like a sponge all it was told that was based on hearsay and medical

myth, and the evidence accumulated there changed medical practice very rapidly. I mean, D and E became the practice of the land. In fact, I argue that that publication by David in *New England Journal of Medicine* was one of the first examples of evidence-based medicine, where we collected data, we published the results, we went on the talk circuit, we got it into clinical guidelines, clinicians changed their behavior. We were able to do that because so few—we really needed to appeal to very few people. Probably no more than two hundred clinicians were doing procedures nationwide anyway, so—

Sharpless So you get to those two hundred.

Cates We got to those two hundred and you can change their practices slowly especially as they start saying, Hey, wait. It's permissible to do this standard of care support. We have evidence to support this practice. We're not risking our own careers by doing something that's anti-standard in care. So I think the medical myths of general being safer than local, general anesthesia being safer than local anesthesia, sharp being safer than suction—all of these myths were just crumbling very rapidly in terms of the abortion providers soaking up a wealth of evidence. The mindset that's opposed to abortion on a, at a moral level, data are not going to convince anyone of them. They're not going to convince you or me to change even if abortion was unsafe, most people—legal abortion, was less safe than continuing the pregnancy to term. If they were, in fact, as I prefer to say it, even if a woman's terminating a pregnancy was more dangerous than her carrying it to term, um, that, it's likely that many individuals who favor legal abortion as a right would say,

She has a right to terminate that so long as she knows that she's making a decision in that choice that carries higher risks than continuing. Do you see what I mean? It's the informed choice element. Um, which I think is a principle that many in the sexual and reproductive health world tend to have. They might not choose to terminate a pregnancy themselves, but they will defend anyone's right to terminate it based on as accurate information as available. It so happens that the accurate information, if told to her, and this is a major issue over the last twenty years as far as what state legislatures are legislating is the accuracy of the information that can be told women. I mean, they're mandating that women wait the waiting period which is by and in and of itself increasing risks. They're mandating that she be told of risks of the abortion procedure alone without any countervailing risks of continuing the pregnancy. You know, when I was in STDs, we were still paying for the results of the Tuskegee case, and that was where individuals in a clinical trial were denied evidence of an antibiotic that would cure their syphilis, and that was deemed unethical. Yet, in the public health arena, we are being prescribed by politicians with a viewpoint to give only half of the information. And I've held that that is unethical, just as unethical as Tuskegee. Again, but it—this is—at that level it's a battle of—data don't matter, they don't want informed choice. They're goal is to do anything they can to force the woman not to have a legal termination of pregnancy as early as possible, and no data are going to convince anyone of that. I don't think. That's an individual decision, and, you know, I'm glad we live in a democracy where it still is the ability—people still have the ability to make

that choice. We'll see what, you know, we'll see what happens.

Sharpless Well, thinking back to the Hyde Amendment, how much were you involved with the sentinel hospitals?

Cates Um, I—actually we had, you know, that was done as a project of the Abortion Surveillance Branch where we had sentinel hospitals in three states that had—and actually we matched three cities, and I forgot what they were, they were like Columbus, Ohio and Ann Arbor, Michigan and then Denver, Colorado and I think Dallas, Texas and—so anyway we sort of matched them for general demographic population and general clientele go into the different public hospitals in those metropolitan centers and then looked over time did the application of the Hyde Amendment make any major impact on morbidity in the states where the Hyde Amendment was implemented. And we really didn't see much which then told us, Wait a minute, why not? And we then did analysis that said, Well, because the women are finding ways to find the money to pay for procedures to get them done safely rather than having them done very inexpensively across the border in Mexico as Rosie had done. So that—and so we found that the Hyde Amendment really had a relatively minimal impact on anything than shifting who pays for the procedure versus changing the outcome of that choice.

Sharpless Okay. What else about your time as the chief of the Abortion Surveillance Branch?

Cates Well, I mean, that was it. I mean, we were doing morbidity and mortality work, we were doing policy work, we were doing denominator work, looking at trends and rising numbers and changing demographic profiles, and also

providing those data for the burgeoning litigation that was occurring as there were more and more attempts to nibble away at the conditions under which the abortion was statutorily allowed to be performed. So CDC data were coming in to play there and then, you know, as the story goes, the opponents—by the way, let me say there was one area where our group was also very much chastised by people who were in favor of the woman's right to choose and that's where we were raising the issue because the first couple of case control studies came out that seemed to indicate a higher risk of breast cancer in women who were choosing abortion. It turned out that those studies were flawed, but we felt it a scientific responsibility also to raise what were potential, hypothetical sequelae of induced abortion. And it, thank heaven, later turned out that the better study showed that that was not a factor, but nonetheless at the time, we were raising it just the same way we would if taking oral contraceptives would lead to thromboembolic disease in women over age thirty-five who smoked. I mean, these are risks. It doesn't mean you can't have access to oral contraceptives. It doesn't mean you can't have access to abortions. You just have to realize it may increase your risk down the road of breast cancer, later found not to be true from the standpoint of better studies, but there was a period of time where then, rightly so actually as it turned out, the abortion groups said, You guys are just pawns in the hands of the anti-abortion group. And we said, No, we're not. We're objective scientists who are calling it as we see it as the data develop. Well, at any rate, most of the data were developing on the side of the safety of legal abortion. That didn't sit well with a new administration in

1980 when Reagan was elected, and the fun story that is told is that the first group to meet with President Reagan when he was elected—he was inaugurated on January 22, and January 23 is *Roe* v. *Wade* day—and so the first group to meet with him was the Right to Life who presented him with a list of demands from the new administration, um, constitutional amendment, get Koop into surgeon general—interesting story unto itself—get Cates out, I just had become the scapegoat, the point person for those opposed to abortion for all of the data that CDC was producing on the safety of abortion. And so the first nine months of the new Reagan administration, they were preoccupied with getting Koop nominated as surgeon general, and literally the day after, literally, seriously, the day after he was surgeon general, Bill Foege had been called into Schweiker's office, who was head of HHS [Health and Human Services], saying, Okay, we're now down to number three on the list. And Foege and I negotiated for awhile until then I dug in my heels actually for awhile until a fateful Friday, called into his office and said, "Look, I have no options now." I mean, either we work together, Bill and I, to find a position within CDC that would accommodate me outside of the Abortion Surveillance Branch or Koop has the authority to order me to Fargo, North Dakota because I was a commissioned officer in the public health service, and to get to—to move me anywhere just if I was like a U.S. Army recruit going to Iraq. So faced with that, Bill, said, "Look, we have this fledgling disease, Kaposi sarcoma opportunistic infection, it desperately needs more help. Jim Curran needs more people on his team. Would you mind—how about that as an assignment?" The other thing that he offered

was the Office of Smoking and Health which was moving down to CDC, and I was actually very interested in studies on tobacco control and how we might control tobacco, I mean, how we might influence smoking in this country, tobacco use in this country, I should say. And—but after considering it, it turns out that this fledgling disease, 1981, needed reinforcements, and so Friday I said good-bye to my colleagues at CDC and Monday I was at my desk in the Kaposi Sarcoma Task Force.

Sharpless Well, we're almost out of time, but I have some more questions about that transition, but maybe we can pick up with that tomorrow?

Cates Perfect. And it's a natural transition because it's a fascinating transition from preventing unintended pregnancies to preventing infections and the types of mindset that that led to.

Sharpless Okay. Well, if we could, then we'll just do that tomorrow.

Cates Sure.

Sharpless Great.

end Interview 1

Interview 2

Sharpless Okay, today is May 26, 2004, and this is the second oral history interview with Dr. Willard Cates. We're in his office at Family Health International in Research Triangle Park, North Carolina. It is part of the Population Pioneers Project, and it's so nice to see you again this afternoon.

Cates Well, thanks, Rebecca. This is fun.

Sharpless I want to back up and pick up on a couple of things we talked about yesterday.

Cates Perfect.

Sharpless And one of them is I wanted to start out and ask you, tell me a little bit more about Chris Tietze.

Cates Well, boy, I'm sorry I didn't immediately weave him more into my life as I was telling yesterday's story. Chris Tietze is truly one of the giants in the field of population pioneers, and were he to be alive today you would be having this conversation with him. He was a, I think an Austrian born demographer who migrated to the United States at the time of the Third Reich issues, and did some major, his major work with I think it was the U.S. Bureau of the Census before joining the Population Council in New York City in I'm thinking mid- to late fifties. As soon as he got there, Chris was a major force in terms of—he was really the major reproductive health epidemiologist at the time that the oral contraceptives were undergoing their clinical trials, the IUDs [intrauterine devices] were being also introduced as a product available to women whether it be—the Lippes Loop was one at the time and the Dalkon Shield of course, and Chris did a variety of studies. And then

eventually during the late sixties, in 1970, when legal abortion was—or an abortion was made legal—on a graduated basis by specific states, New York State, California, sort of the East and West Coast, Chris was the initial person doing also studies of the safety of legal abortion. And he started a lot of the studies that CDC [Center for Disease Control and Prevention] then picked up from him. And he was more than glad—he was at—he was probably about in his early sixties even at the time that Carl Tyler in CDC and Jack Smith in CDC were picking up his abortion surveillance efforts and picking up his abortion morbidity study efforts, and he was very happy to hand them off to this sort of burgeoning new generation of scientists because there really was not an heir apparent with—at the Population Council at the time. And this wonderful collaboration between the Population Council and CDC took place, and specifically between Chris and largely the Abortion Surveillance Branch. And during our formative years, the mid-1970s up through the late 1970s, when abortion epidemiology was taking off at CDC and the reins had been handed by Chris, he remained a person who at the international level was collating all of the information into what I think he called the *Abortion Factbook* or something, *International [Induced] Abortion Factbook*. We were collating the information from all the states for the United States. He was collating information from the whole world for a global fact book, and he had also done some pivotal work in abortion mortality. And there wasn't—for awhile, we didn't create a manuscript in the—on abortion in the 1970s without running it by him for review and usually even going up at, as I say, probably about once a quarter

to just meet with him face to face. And I always considered him really one of the two or three main scientific mentors that I have had during my life.

Sharpless What did you learn from him?

Cates Well, you know, number one, he was a very precise thinker. I mean, he could pick apart all of the biases that might explain why abortion trends were going up or going down, what were the holes in terms of the types of infer—reasoning processes leading to the inferences that we were drawing. Um, the other thing we learned from him besides just sort of methodologic rigor was a sense of using data for advocacy. He was always the first in line to speak at a microphone, drawing the inferences about the safety of legal abortion and its implications for maintaining momentum in the area for safer procedures. And, I mean, he was just unharnessed and really a wonderful role model to be able to speak no matter how controversial. One of my favorite things he did, you know, he was probably the first person to start a registry out of New York State on deaths from legal abortion, and then when we expanded it nationally he was, you know, just right in the middle of every case we were looking at, looking, trying to either figure out preventable aspects or, um, figure out ways to analyze it to produce more accurate inferences. But there was a period of time, probably still is today, where the completeness of the abortion statistics collected by CDC were challenged by those opposed to abortion saying that you're missing, you know, five times more than you're getting. And we had studied this a variety of ways using different techniques for assessing underestimates of hard—to sort of ascertain information through interestingly a sort of forestry technique called

capture-recapture methods that have now become quite, um, popular in HIV for estimating the number of sex workers in a given city where you use two independent sets of data, look at overlap and estimate how many are missed. But we were working on that and somebody challenged, and Chris said, "Okay, I'll tell you what I'm going to do," to the people who would stand up in the middle of the meeting and had really—and he said, "I will give you a hundred dollars for every new death after x period of time"—I think it was one year after the close of the calendar year to allow the reporting of the deaths, the filing of the death certificates and all this. "If by the end of 1977, you can find any additional deaths that have occurred at 1976 or earlier that are not contained in CDC's database, I will pay you a hundred dollars. Now, I just want—so that's my challenge to you. You can—please, go out, find them! Help us, we want these data to be accurate, and I will pay you a hundred dollars for them." Well, he never had to pay up. Then he started challenging and saying, you know, that for people who were going to challenge, he had said he'd put his money on the table and paid for new deaths, but if they're going to challenge and say there are many out there and they don't produce, if they don't have any within three years—he'll say, "Any, uh, after one year when we've frozen our database, if you don't find any in three years, we'll have an agreement that either you pay me a hundred dollars or you never get up again to talk. You choose." So it was just fun to see him, you know, make that challenge, and it was win-win, I mean, in the sense that if they, if anyone was able to produce more deaths, we wanted the reports to be as accurate as possible, and if no one could produce them,

Chris wouldn't have to pay a hundred dollars and we would have a reasonable certainty that they were. And he never had to pay. So we thought, at the time that we were really conducting active surveillance of deaths, we were combing all the death certificates, in some states we were even linking birth certificates and death certificates and then following those up to see what the causes were, was there anything in it that could possibly be an unreported abortion death. So, I mean, it was really interesting to see what those—what, you know, what were possibilities.

Sharpless Um-hm. But you were coming up with really clean data.

Cates Yes, exactly. And that made us feel—that encouraged us because, I mean, again, what we wanted to do is really feel comfortable that whatever the findings were they were based on accurate data. So, anyway, he was a terrific mentor. He died—I'm trying to think when—in early eighties. And I remember he once, you know, over one of our many gin and tonics together or whatever it was, he once confessed to me that he had one major regret in his life. He never had any children, but it was more that he'd never been in academics with the chance to sort of forge young minds and so on, and I remember my—I was one of the speakers at his memorial service, and I said, "You know, I remember that, Chris." I just wanted, you know, Chris to know wherever he was, that he left behind a whole generation of those of us honed in the EIS [Epidemic Intelligence Service] and the Abortion Surveillance Branch that, you know, drank in his every word and we're truly his mentees in every sense of the word. A wonderful person who I wish were still alive today, I mean, he's a—he was great to work with and great to

learn from.

Sharpless Thanks for that. The other thing I wanted to pick up on was the, I suppose the accurate term would be the growing politicization of your work.

Cates Um-hm.

Sharpless Um, how early on did you start to feel political pressure, to feel pressures from the outside in your work?

Cates Wow. Um, I suppose it was always there, but I'm pretty naïve and was—and still am so convinced of what was the public health mission of what I was doing that I—I really did not—I probably was somewhat ignorant of some of the political pressures. The first real understanding, I think of it, that I had—not—was that—of course, there were all these discussions during the Hyde Amendment and the passing of laws about that, that was clearly a politicalization and we had to be careful in terms of how we were portraying things, but the collection of data that assessed public health impact of a policy like that was very clearly in the domain of what CDC should have been doing. Then when I started realizing that, wow, this was getting serious and I was real—I, personally, was becoming a target, and CDC was also becoming a target of the anti-abortion groups—

Sharpless When you say becoming a target, what do you mean?

Cates I mean that we were incredibly, and I specifically was named in newsletters as being the person responsible for this misinformation coming out of CDC, that CDC itself was this as they saw it, you know, this political organ that was only trying to keep abortion legal and not, and so on. I mean, and that—that was in the late seventies is when I'm now remembering it really hitting. I

think, to tell you the truth, it probably had always been there, but Carl was just so phenomenal at running interference that I probably really never felt much of it. Um, yeah. But, I mean, when I really started feeling the heat was when Reagan was elected and Bill Foege increasingly would—not—I mean, I had two very specific sessions in his office. The first relatively early on where he said, you know, "I just wanted to let you know that, sort of a badge of honor that you're getting named and, you know, if you ever were to think that it's just, you know, it's time to move, feel free. And you just let me know what you want to do." I mean, that's what he said early on. And then there was in people's minds the *Washington Post* interview where an editorialist named Judy Mann had called me to get a quote on something, and as I recall, I actually, literally, forgot what the quote was, but it was a misquote, unfortunately. It might have been exactly what I said, but it was not what I meant to say, but it was something like, something like, "Abortion is safer than childbirth," but it came out, you know, killing the babies. Not quite, but I—no, I didn't—it didn't really come out that badly, but it came out different than the usual way I became pretty skilled at saying, which was "pregnancy termination versus continuation" using words that were as, um, as neutral as possible about what was the choice for the woman. I tried to always avoid, in fact, calling it a mother. I tried to avoid the choice of the mother, or I tried to avoid thinking of it from the standpoint of an infant, it was an embryo, a fetus depending upon what—and just to try and keep the really loaded words out of what we were doing in a way of always driving the discussion toward what do the data say about

this, not what is the, you know, society's very real moral issue around it. And I would usually always preface most of what I did with, These are data that I've—we have collected at CDC. They do not—they do not address the underlying moral issue of when does life begin, what is the right or non-right to privacy of the woman, et cetera, et cetera. These don't answer that. Those are questions that individuals have to answer for themselves. What they do answer is, to the best of our ability, what is the public health effect of this switch from predominantly illegal, unsafe procedures to safer legal procedures, what has been the effect of legalization on a procedure that can now be studied and can be—have inferences drawn on what are the safest ways to perform this very frequent, you know, very frequently performed service and as a procedure and so on. So, I mean, these are what I saw the data doing, what are the best of—none of these sys—these methodologies are perfect, but what are the best designed to answer the question is, does restricting federal funds for abortion have any impact on the number of procedures or the health of the woman choosing or would have chosen this procedure had the federal funds been available. I mean those are—those were legitimate scientific public health questions that we were best equipped to address and get data on and draw inferences from those data. That did not answer the moral dilemma.

Sharpless So what happened with the—

Cates The *Washington Post*. So, anyway, whatever happened, the quote that was to me at the end of the article evidently set some dominoes in motion where what I told you about yesterday which was the, um, being called into Bill's

office—

Sharpless This was the second time?

Cates This is the second time I was in his office. There was about—the first time was relatively early on in the administration's tenure, like, I would say in the first or second month.

Sharpless Okay. So early 1981.

Cates Well, that might not have been. My guess, now that I think about it, was—I once chronicled this—I think it was like the summer, I think June of 1981. And that's when he said, you know, your name, you know—you must—I remember, as only Bill Foege could do it, he said, "Boy, what an honor, you know. You at your lowly position within CDC are, you know, I go to these higher-level meeting in HHS and your name is bandied around as if you're the director of CDC because that's all they care about." I said, "Whoa, this is really interesting."

Sharpless And he told you directly, he didn't talk to Roger first?

Cates Well, he might have. I, honestly, I don't know who he had talked to in between. By this time, you know the chronology probably better than I remember it. But Carl had left the Family Planning Evaluation—Family Planning Evaluation Division to head up the epidemiology program office. CDC had reorganized and they tapped Carl and his managerial expertise to head up this CDC farm system of applied epidemiologists, and Roger Rochat took over from being deputy director to director, and I was made deputy director at the time. So there was this transition of the old guard to the new guard that was sort of occurring as Carl left, Roger ascended, and I

filled in as deputy, but still continued the abortion surveillance stuff. I mean, there was only—we were called the Abortion Surveillance Branch, but we referred to ourselves as the Abortion Surveillance Twig because there were really only like three or four of us maybe at our max, certainly permanent staff, and whatever number of EIS officers' arms we could twist to match with us. But—and so this was 1981 when political heat increased, but most of the focus that I remember in 1981 was on, from the administration, getting [C. Everett] Koop nominated. And I was doing a lot of APHA [American Public Health Association] work then and so, I mean, I get my APHA interestingly with sort of fighting Koop's appointment: how could he be surgeon general, he was a surgeon, the only reason he was being nominated was he was anti-abortion et cetera, et cetera. Well, it just shows how wrong you can be. I have another interesting story about that, this. But he was eventually confirmed after like nine months on the—of nomination on the Senate floor and turned out to be arguably the best surgeon general we've had in my lifetime in terms of a very independently minded, health-oriented, grandfather figure, and it sort of changed my mind about who should be surgeon general. They should be surgeons, not, you know, I joked around about David yesterday. But Koop was absolutely the clearest surgeon general. The last thing they should be sometimes is epidemiologists because we're always, Well, it could be this, it could be that. The 51 to 49 percent thinkers that I said yesterday. Surgeon generals, surgeons are much more 0 or 100 percent. Yes, no. And Koop himself was this wonderful thinker. Once he'd made up his mind, he had a logic behind it and he gave a clear

message. And it was sort of ironic that he became surgeon general, that then—the way I remember it, and whether this is accurate or whether it was the *Washington Post* that was, it could be both—it was within days of his confirmation that the heat got turned up now on me because while the, I mean, the political forces opposed to abortion were just going down their checklist of what they wanted. And Koop, once he had confirmed, was in power to move me to anywhere he wanted to, but just by virtue of being the surgeon general and me being a commissioned officer. So it was that confluence of events plus the increased visibility of this flamboyant quote, controversial quote that was in a column of a *Washington Post* columnist. So, um, and it really wasn't, it wasn't an interview per se, it was sort of a, I mean, it was a long story on abortion and women's choice and this type of thing that ended at the bottom with, literally—I just remember it was the last sentence—and I read it, and again, in my naïve way I didn't think anything of it, but a lot of people evidently said that that proved the touchstone within the Washington circle that led to a call to Foege saying, "Okay, you've got to move him or I will." So—

Sharpless So Foege called you in.

Cates Foege calls me in and says, um, that a couple of things— (knock on door) Yeah? (door opens)

(Pause in recording.)

Sharpless Okay, so Bill Foege called you into his office.

Cates Called me into the office and said, as I remember it, I was probably pretty numb at the time when he was telling me that it now has come to a point

that Washington is specifically asking for me to be relocated from the Abortion Surveillance Branch. And he had a couple of opportunities. It was, as I said, the smoking and health was moving down from Washington and was that something I'd be interested in, or this fledgling Kaposi Sarcoma Opportunistic Task Force that had been—story was underway for about four or five months and they continually needed much more help and would I like to go to work with Jim Curran and so on and be transferred to the Venereal Disease Control Division.

Sharpless This was on a Friday?

Cates This was on a Friday morning, and I remember because we were due that evening to go over—the Grimes and the Cates and the Schulzes were all going to be gathering that night over at Ken's house. And it turned out to be a good Manhattan night that we were all slightly under the—but it was, you know, it was just sad that there was that degree of—hey, I remember, you know, I'm a pretty stoic guy, but it was a shock to me that they would actually be able to reach down to the depths of CDC. I mean, I was way below as a branch chief, way below the CDC director, though he had been my—he's a friend and still remains a friend and mentor, and as a— my preventive medicine residency chief while I was at CDC, Bill Foege was. But—

Sharpless What was your initial reaction when you—when he broke the news?

Cates (speaking at the same time) Well, I was, as I say, I was sort of numb and I said, Okay.

Sharpless You said, Okay?

Cates Oh yeah. No, I mean, I didn't fight it at all. He said we could fight it. He says I—as I recall, he said, "We could fight this, and I'm not going to order you to do it, but if you want to fight it, rest assured that Koop has the ability to move you anywhere within the United States and I don't have any power to stop him."

Sharpless It's like a military chain of command.

Cates Yes, yes. Exactly. And, um, and, you know, now is a time where if we can say that we've done all of this voluntarily, I'll get a few points for CDC by handling the situation and we just won't—we'd have a confrontation you never know what will happen. I like to think, I think this is much more just a pure coincidence, but it was relatively soon after that that CDC had been in some real budgetary difficulty because there had been cutbacks from the Reagan Administration in that first year, and we had something like fifteen million restored to CDC that allowed us really to continue at the same level of staffing without going through a major RIF [reduction in force]. And I like to think at least there was a temporal correlation if not causation with CDC having "handled" Ward Cates in that regard.

Sharpless To what extent did you feel like you'd taken one for the team?

Cates Oh, definitely. I mean that was the implication, but for Bill or for Carl, or for CDC, I mean, I really would have done anything. That's part of life that you are, when you are a part of a larger organization and you can do things to help, you do. I mean, I—the sports that I played, I'd always been a person who was sort of a lineman blocking for, you know, the backfield and all. So, I mean, it—I think outsiders were more upset by it even than I was or I felt

at the time. But I have—I remember I had a strange reaction and just—at least there was a human condition probably, but certainly a personal condition where when things are done to you that are not within your control, I mean, that's some of the hardest things to really deal with in general. And, um, and then the unfairness of it, I mean, it was sort of because of the success of the data that were collected and the science that was generated and so on—was so successful in documenting a public health effect, success led to, you know, failure is not the right word, but led to this particular move versus something that I hadn't done, it was because I was so successful in doing my job, not because I'd failed in doing my job. So it just seemed—it was that inequity there. And in a stoic way, I showed up for work the next Monday and Paul Weisner, the director of the division, took me in and said, "You must feel horrible about this, but we're thrilled of course that we got you," and this type of thing. And, you know, did everything he could, then Jim Curran and I sat down and decided, you know, what was I going to do within the team. And I, you know, I felt okay about it for probably about two or three weeks. And then all of a sudden, I must have had this delayed emotional reaction that kicked in, and I remember I was driving home one day just, you know, from CDC, and I was wearing contacts, and all of a sudden, I burst totally into tears and, I mean, the only other time that that—*only* other time that I remember doing it so I said I had to drive off the side of the road, collect my contacts, and wash down, things like this—was when my sister, my younger sister was dying, this was in, gosh, I can't think, '77—'78, and that was another unfairness thing,

esophageal cancer and died within six months of the diagnosis which was in—within a year of having a child. And again, it was one of these life's unfairness things that just all of a—welled up, welled up, welled up, and all of a sudden burst within me. And this was a similar thing that had happened, oh, I'd say, maybe six weeks afterwards. But I remember coming in after I'd settled down, I could drive off again, I remember coming home to Joan. I said, "Aah, it happened again. Must be more serious." And I think it was the unfairness, but it was also that that family planning group, this gets us back to the population pioneers that Carl had assembled at CDC in the last two or three years of the late seventies—early eighties was a critical mass of thinkers and doers and shakers both from the so-called leaders and we'd been sort of leading in that group of the Family Planning Evaluation Division. There was a meeting that would occur every week called COBRA which was the Chiefs of Branches, you may have heard of that, and I had been the newest member of COBRA—it was Howard Ory, it was Leo, it was Roger, it was Carl, it was Jack, and I was the youngest and I'd been there for six years. So we knew every aspect of the way each other thought. We looked out for each other, we—and it was just one of these—and we'd also had this farm system of people who were working—

Tape 1, side one, ends; side 2 begins.

Sharpless Okay, I'm sorry. You were talking about the farm system.

Cates Yeah, and the people who were really the rest of the team members, the Susan Hoalks—anyway, it was a glory day that organizations really have in terms of just an amazing collection of individuals who are literally state-of-

the-art in their specific field and who, rather than feeling jealous of each other's accomplishments, felt pride. And it was this growth thing. It was truly remarkable, and, um, and I loved it. And I think one of the things that was hardest to adjust to was being yanked from that room. And I think I was the first one, even though I'd been the youngest to join it, everybody else was still left behind and I was yanked and put somewhere else. And as it—oh, the other thing I remember, it's coming clearer now—is as the political pressure was increasing from the time Bill had first talked to me in the summer of '81 till I think it was, I could be wrong, I think it was early in January of '82 when I—that fateful Friday. I could actually look back at my calendar and figure out exactly when, but I think—it was definitely January '82, I just don't know the exact date when he called me into the office that Friday morning. I remember the fact that people were calling for my head, sort of like Rumsfeld now, was—made me dig in my heels. I mean, I probably had been thinking, you know, I've done this abortion surveillance stuff for, gosh, I guess it was seven, eight years, it was probably time to start thinking of what were—what was the next challenge I was going to do. But because it wasn't my choice, it was people were trying to force me out, I probably dug in my heels more than I meant to, "I'm not leaving. No, no, CDC would never do this to me!" So, I mean, I obviously was totally unrealistic about what could happen, but I also didn't listen to the sort of need that humans have to take on new challenges and new opportunities, and so it was eventually done to me. And as I said, that next Monday getting to the STD division, um, Paul and I sat down, and Jim and I sat down and

we mapped out a strategy, and, you know, my life changed. I switched from being a—from trying to prevent unintended pregnancies or unintended births and became trying to prevent always unintended sexually transmitted infections, and that was a huge interesting jump in and of itself, just the mind-sets of the fields were so different.

Sharpless Well, I don't, I don't mean to dwell on this, but it is something that people were very affected by it when this happened. What were, what did the Schulzes and the Grimeses and the Cateses say to each other that Friday night?

Cates Wow, that's a great question. Well, um, you know, every—the three of us and, as well as, you know, the spouses were, I mean, we were really down. It was felt lousy that, you know, they knew I was leaving. We really didn't know much implications of what the future was so we, as I say, drowned our sorrows with Ken's Manhattans, and I don't—I'm trying to think, I mean, it was trying to bolster each other to some extent and trying to figure out, Okay, David, now you're going to be the one in charge, and here's what, you know, is left over, and here's what the continued sort of mission is that we can do, and, you know, I'll certainly keep in touch, I'll be in the same building, just moving from the fourth floor to the third floor of Clifton Road facility, I mean, it wasn't even moving a whole building or anything. Not like these days. But—and, in fact, it was sort of funny because it was all done so quickly that I continued interestingly to use the secretarial services of the Family Planning Evaluation Division because the VD division was not set up to sort of function in the way that I was used to having clerical

support, administrative support for the way I was writing articles. In fact, it was interesting, I also had several articles that I was in the midst of writing or, in fact, probably the most pivotal article that, when you look back on it, represented a summary of my career was to science as a journal which was called "The Public Health Impact of Legal Abortion," and it had been submitted and was being reviewed at the time I was removed, and was published while I was within the Venereal Disease Control Division. So, I mean, it wasn't as if I wasn't still having this residual, like insurance residuals of, you know, getting—getting money from selling policies, I mean, there was all this scientific backlog of papers and analyses that I was queued up to do and I continued to do even while I was in another division. But it was—it, to me, you know, it changed my life and my gradual orientation to the STD/HIV world, but it also didn't stop me from continuing an interest as long as there remained stuff I had been working on, I didn't have to cut that off totally.

Sharpless Well, Ken and David must have been apprehensive.

Cates Well, I think they were. I mean, they were certainly—I mean, everybody was pissed off about it. Jack as wonderfully sensitive Jack does—did—wrote the most endearing poem that also made me well up when I got it about life's unfairness, don't worry, we will—but, I mean, it was just this great Jack Smith poem that I'll bet if I really look for it, I could probably find again because it was one of the things in my life that I saved. And he gave me—Jack was a, you know, an amazing, you know, sort of horticultural flower person, and he gave me a vase with a porcelain flower in it that I had kept

on my desk for all my time at CDC. I don't have it here anymore, but it's probably somewhere. So, but he was very poignant, and everybody was poignant as it started sinking in. I didn't tell—I literally didn't tell anyone that Friday. I just continued working. I told David and Ken that night and I told my wife. And then the next Monday at—when I had left, and had my office, I came up and said, "By the way, I've been moved to dut-duh-dut-duh-dut." Meanwhile at—to our leadership, Bill called Hod Ogden, who was head of the center and, as I recall, I don't think Bill had talked to Roger before he talked to me. I think Hod and others told Roger, Jack, Leo either midday that day, but I didn't. I remember I never—I got out of the pain of having to tell a lot of people. I went around and said hi and I'm sorry, but this had to be done.

Sharpless You did that on Monday?

Cates On Monday is how I remember it. I remember we went out to lunch that day and I was trying my best to be as stoic as possible as if nothing had happened with a group that was with me, and a couple of people came up to me after the fact and said, "That must have been amazing. I mean, that you could sit there and laugh it up and talk about the future and this type of stuff, and not—" I said, "Well, I was just totally numb. I didn't know what to say. I was still reeling from the implications of that."

Sharpless You mentioned outcry, APHA and other circles, what did you hear from the people outside CDC?

Cates (speaking at the same time) Well, you know, that's a great question. There was a lot of anger from outside because, you know, just like what would

happen nowadays even, it would be even louder nowadays, but when people started realizing that I had been moved, they would call me, What do you want me to do, dut-duh-duh? I said, "You know, please don't—nothing you do now is going to change it." And my standard joke line was if you write a letter to Schweiker or Reagan or whoever complaining about this, all it will do is generate a letter that will probably eventually find it—we call it, you know, these congressional letters that you have to answer for somebody in the higher—it will probably eventually find its way back to me and I'll have to write a response for Secretary Schweiker. So, I mean, you'll save me work if you just, you know, just—and so that's, I mean, there was very—as I remember, I thought we were pretty successful in keeping the outcry pretty quiet. I did not remember there being a big cause célèbre. I think it affected much more the people that I was close to because of just the abrupt way that I was jerked out. And it was the first of, you know, that amazing team—Carl, of course, had been tapped and moved on, but Carl was actually the first one to leave that group, then I was jerked out, and then, you know, several people stayed, I mean Jack and Leo forever, uh, Howard moved with Carl to EPO [Epidemiology Program Office] interestingly, and then David and Ken eventually I recruited them over to the STD division, you know, getting some anger from my fellow colleagues at the family planning group. But, you know, the, sort of the life of a critical mass of people like that is relatively short to have people at that high a level of functioning stay together for even as long as three years. I mean, it happens with any department that just has this massive collection of superstars because they are continually getting

offers from everywhere else. And it's not because they don't like where they are, it's just at some point somebody usually has a better offer and chooses to go. The unusual part of my leaving was that it wasn't by my choice; it was by someone else's choice.

Sharpless Um-hm. I'm wondering to what extent people took this as a sign that the Reagan administration really intended a paradigm shift.

Cates Um, I think, I think they took it as, Boy, the Reagan administration was serious about this stuff. You know, they'd been able through the political process, and every new administration is able to do this, to put people in place who had like-minded values, but, you know, CDC had, up until that time, been relatively immune from the political process. So it was—here was this, you know, fledgling agency down in Atlanta, began as a malaria agency, was a communicable disease center, became the Centers for Disease Control, slowly but surely got into some of these more controversial areas like family planning and, you know, non-infectious diseases and then got into abortion. And, you know, through the unique position of being able to collect data on this procedure that was, you know, sort of made for a young ambitious epidemiologist interested in analyzing data and drawing inferences from it and seeing public health effects and so on, was a gold mine for me, and then that led to—led to this change. It might have been even the beginning of the politicalization of CDC in a certain extent. Although—although it had happened before, and the swine flu episode, for example, had led to Dave Sencer moving from, you know, being removed from his job. So it—as public health started getting more visible, moved from the back burner of

interest to front burner of political interest, so went the stakes. And being able to do one's own thing out of the spotlight of politics, but, you know, in order to—as more funds have been plowed into CDC, as more responsibilities have been given to CDC, as health on the domestic strategic profile has become a bigger issue in public health, so has CDC. And now you have bioterrorism, and you have SARS, and you have AIDS, and you have, you know, environment, and you have all, you know—gun control—I mean, you have all—tobacco—you have all these issues that, in fact, in order to have policy impact, do involve politics. And, you know, as I've grown and matured, I realized those were in essence, I just happened to be at CDC in the right place during the seventies, like I was in New Haven at the right place in the sixties to, um, to be able to collect data somewhat independently. We'd never—I mean, that whole abortion then, you'd probably hear it, I mean, the abortion surveillance group gradually got dismantled as a main family planning focus during the Reagan years and has been limping along ever since, whereas it had this, you know, this NASDAQ rate of growth during the seventies in terms of output and all. And so, um, you know, that was just sort of—it wasn't the beginning of politicalization, but it certainly was a sign of the politicalization down to really lower levels. And there were others along the way who were moved, Clark Heath for some of the environmental things that he was doing, Mark Rosenberg in recent years, within the last five or six years, for head of—he was director of the Injury Control Center and forces moved him out because he was saying things that the gun lobby didn't like. So, I mean, again, that sort of comes

with the territory and if you're saying the right things in public health you run a political risk of alienating the politicians in power.

Sharpless But other than Dr. Sencer and the swine flu, you were probably the first.

Cates I was certainly the first in the family planning arena of CDC in that regard, and I think that's why it made, you know, such an impression. Plus, I mean, again, I was just part of that group and that group was a whole, it was greater than the sum of its parts, and as that group started disassembling, it just—it was—things changed. I mean, it had a different feel to it and so on. I guess. I mean, again, I had—all my friends were there and it's—but slowly but surely people had different opportunities, many had different opportunities to move.

Sharpless So January Monday morning—

Cates January Monday morning I settled into a new desk and, you know, was—began learning a new field. One thing that was really interesting was the mind-set of those in the field of family planning and those in the field of STD. Family planning was much more nondirective. You would counsel people on the risks and benefits of these multiple choices on ways to prevent pregnancy, and they—usually a she or a they—the dyad couple would choose which method for them worked best for them to prevent pregnancy, whether it was pills or there was sterilization whether it was IUDs, whatever. In STDs, switched totally. You had the person who was infected. You sat down with them, Tell me the name of all your sexual partners. It was very directive and locating information, We're going to go seek them out and take all these pills until you're finished. Here, here's your antibiotics, because we

don't want you transmitting to anyone else, and use condoms if you've got to have sex again. And it was all these directive messages. And it took me awhile to understand why I felt so uncomfortable in this new field, and it had to do with just the whole mind-set of the field. And I understand why it was, I mean, if you're trying to prevent the spread of infection, and curing the infection actually became a preventive public health intervention, and you're letting people know exactly what they had to do to slow the spread. An unintended pregnancy is not an infectious disease, it's not going to be transmitted necessarily to anyone else apart from that unintended pregnancy or infant, but you weren't intervening from a public health standpoint, you were intervening from a, you know, from an individual choice standpoint of what's the best way to achieve that end of that for them. So it was just a very, very different mind-set, and it took me awhile to evolve to what it meant. Now, what I mostly did during my first years in the STD division was to look at upper genital tract infections. Oh, oh then there was—let me say one more thing—there was another time early, like the summer of '82 where the HIV group which I had been initially a part of was splitting into an STD group and an HIV group and it—because it had initially had been an HIV group within the division of STD, and almost everybody in that group, and we were given the choice of staying or leaving, staying in the STD arena and doing gonorrhea, herpes, chlamydia and that stuff, or going with HIV and moving actually to a whole new part of CDC is where it was being placed. And so Jim Curran and Harold Jaffe and most of the crew in "And the Band Played On" chose to go HIV. I had gotten into some infertility studies and

HIV wasn't the main issue, it was gonorrhea, chlamydia and some of the other organisms, and it was much more natural evolution of the reproductive health aspects of infection. So I chose to stay with the STD group, still headed by Paul and then the new HIV group headed by Jim Curran. And, um, and then within a couple of months after that, Paul left, and—to go to the Center for Environmental Health. So there was a big search for a new director, and I wasn't even in the running literally, new kid on the block, didn't know much. And they had a lot of outside gurus who were being interviewed and interested, and I said, Great, you know, get any one of them is fine with me. And what happened was that evidently the director of the center that the division was in, a guy named Mike Lane, said, "You know, let's get a few more outsiders, totally new outsiders. Why don't you just go interview Cates just because it will be fun." Sort of like this. And, yeah, just give you somebody fresh, not the same old, same old STD leaders. And so I went in to the search committee, and, literally, it was almost just like this, only, you know, I didn't have everything else after it. The way Paul Weisner interviewed was just did this free-association, tell-me-about-your-life type interview. And so I went rambling on and on and I guess that they—the search committee was impressed enough by my enthusiasm, certainly not by my knowledge and said, You know, you really would come at this with a big fresh insight. Which I think appealed to Mike who was a bit of a maverick himself at the time. And it came down to a really seasoned person who had been in STD in awhile, but was making—he was outside and was making various demands of CDC—if they were to hire him they'd

have to switch this here, they'd have to give him this salary and so on. And after a while they got tired of negotiating with him, and said, Ah, since it was so close between Cates and him, we'll just offer it to Cates and see what happens. So they did, and I remember when Mike called me, and then Bill Foege, interestingly, he called me within like half an hour after that to say, you know, congratulations et cetera, et cetera, we still have to get this through HHS because it's you, but trust me. I'll work on it, and I'll let you know if there's any problem. Well, then it took like about a week, and the word was out on the street that it had been offered, but that it—it hadn't been announced. I don't know how these things get out, but it was. I remember one of the old members of the division came into my office and said, "You know, I've heard it's been offered. I know it's—it must be—Ron St. John was the other person who they thought it might be, he said, "because Ron's in Argentina, I bet they can't get in touch with him." And so they're saying to me, and I'd known all along that, you know, they'd offered it to me. I said, "Oh really, that's really interesting. Maybe that's why." And—but it was because they couldn't get in touch with the HHS buy in on this appointment, which was a big deal at the time because it was a much higher position, as I say, accounting for like 25 percent of CDC's human resources and about 20 percent of our budgetary resources, bigger than all but one center, and, you know, and so was a very important position for CDC. None of which I realized at the time by the way. I thought, Oh, well, I'll be glad to step in just because it's fun to lead things.

Sharpless Now, how long had you been on board at this time?

Cates (speaking at the same time) I'd been on board, let's see, this was December '82, so about eleven months. Um, and Paul announced his retirement I think in September so the search was from September through December. But then I took over. Didn't know what hit me when I got that. Luckily, the second farm system at CDC was housed within STD which was why there were so many human resources, and that's the managerial farm system. The EIS was like the scientific farm system and the public health advisors were the managerial farm system, and the way they did their apprenticeship years was in case finding STDs as they're at their entry level for two years to teach them real public health—how you go, you've been infected, tell me about your sex partners, tracing down the sex partners and so on. And then, if successful there, they move up within the managerial hierarchy, and, at CDC, and a wonderful system which we've totally emulated here which is to have sort of a scientific leader responsible for the technical aspects and a person, usually, less so these days, having grown up through the EIS, and coupled hand-in-glove a public health advisor at the branch or division level doing the types of administrative, budget, operational support to this usually totally inept manager. As I say, you know, people ask me what I am, you know, I hide some of my managerial interests, but I'd say my strength is as a leader in the division, and a human resources recruiter, and a financial resources recruiter guy, and a representing of the organization outside the organization more than an internal workings of the administrative because I'd always been spoiled. I'd always had, now, these wonderful administrative people who were four plus brighter than I was in this area, and who could make

everything go while I could, you know, just go out and give talks. So, I mean, it was a wonderful system, and sitting in the STD division, I was the titular head of that particular farm system of the managerial farm system, and it was great to learn all that. It just taught me a side, an action side of CDC I'd never known. It taught me about the grant process where funds were coming in to CDC and were dispensed out. It would have been the STD equivalent of the Title X programs of family planning, but these were STD grants that went out to all the states and they had various responsibilities attached to them. And I was, you know, in that job at the time when then HIV by 1985 or so we finally had a test for HIV. Big bucks started rolling into CDC and the group that was used to giving out big bucks was this STD division, not the scientific wing that Curran held the surveillance and epidemiology and case control studies and all that stuff, but didn't have the person power because it was mostly scientists to handle this large infusion of money. So during the eighties as HIV gradually got revved up—well, all through the mid-eighties the—our STD division, we used to say, was the slush fund for underwriting HIV activities within CDC, our STD grant was diverted in that direction. But from 1985, we became the repository and our budget grew from 40 million when I first took over, up to 320 million when I left. So it was this massive—of which much of that was HIV being given for voluntary counseling testing services, ramping up with that, plus some community orientation and other things. And that turned out to be really fun, looking at that, learning more about it, and getting involved with policy decisions of HIV and getting, in some ways, further and further away from,

uh, from family planning although a lot of what we were doing with chlamydia was using family planning programs as a screening programs for chlamydia under the rubric of infertility and getting Congress to give us money for that. So where it came to the integration of family planning and reproductive health, I always had a soft spot for that, with sort of analyzing the choice of different contraceptives and their effects on the acquisition or, if infected, transmission of different sexually transmitted infections. I mean, that was sort of my scientific stuff in the—while I was in that division. And that turned out to be just a whole bunch of fun.

Sharpless Let me change tapes real quick.

Cates Sure.

Tape 1 ends; tape 2, side 1 begins.

Sharpless All right. This is the second tape with Dr. Willard Cates on May the twenty-sixth. Now when you went over to the VD division, you were looking at Kaposi sarcoma.

Cates Well, that was the name of the syndrome at the time.

Sharpless Okay. That was my question, what was known about HIV/AID when you went?

Cates (speaking at the same time) Right. Well, it was just emerging. We knew from all the epidemiologic characteristics that it probably was a sexually transmitted infection, and that's why a lot of the early personnel and early organization responsibility for investigating this disease was being done by the Venereal Disease Control Division, which was the name of the division when I got to it. And my initial job was to work with others to try and set up

a surveillance system for adequately capturing the diagnoses of this condition in the various states. And so I had—I had, because I had worked with some, with Jack in the abortion surveillance process, was used to working with states to set up this active surveillance, and that was fun for the first six months, and at the same time, I had been, um, given responsibility to oversee the scientific projects dealing with STD-related infertility, which was also burgeoning up as a—both a national and a global concern. I mean, you were getting couples delaying their desired pregnancies until later, finding out that, you know, that they were having more trouble getting pregnant in part because tubes were blocked and so on. And so it just became a great—in vitro fertilization was, as a treatment was getting real —it was fun. Again, I just happened on the scene, but it was also at a time where interest in that topic was burgeoning more than usual. And so I—my first couple of years had been working with WHO [World Health Organization] and others in order to do studies, excuse me, adequately defining the role of the sexually transmitted infections predominantly gonorrhea and chlamydia in causing tubal, what's known as tubal factor infertility, which is the main infertility interestingly in at least Africa. And so that was where I first started getting involved with STDs in Africa. And then, you know, later HIV in Africa clearly became a huge thing. So that was—that was sort of what I was doing in that division which was still a slight overlap with—at least a reproductive health issue infertility and infection.

Sharpless Now, as you, as you moved into the division as the head of the division, how did you keep HIV and STDs balanced on the agenda scale, or how, you

know—

Cates (speaking at the same time) Well, at first, at first it was really pretty easy. Well, at first, like the first several months my short term assignment was working with Jim to create the surveillance system which we had done really by the first couple of months. And then it was—I gradually was spending more of my time investigating infertility and not HIV, and then came the sort of bifurcation of the division into the non-HIV/STD side and the HIV side. I, you know, chose, but, of course, it probably would have been chosen for me because everybody else was choosing Kaposi sarcoma opportunistic infection, and they needed bodies doing good old garden-variety syphilis, gonorrhea and chlamydia. And so, anyway, I moved back into the syphilis, gonorrhea, chlamydia group, herpes group, and the HIV group took off on its own. And it was around that time, the summer of '82 that—it had been about a year since the discovery of the first Kaposi sarcoma opportunistic infections in gay males, and it was clear that those were only byproducts of something—they hadn't identified it even though it had all the characteristics of a sexually transmitted infection—but something that was infecting the immune system leading to these opportunistic infections. And so, in the summers of '82, that group changed its name from KSOI, Kaposi Sarcoma Opportunistic Infection Task Force, to the Acquired Immunodeficiency Syndrome, AIDS Task Force. So that—it was the summer of '82 where KSOI was out and AIDS as a name for the end-stage condition was in, and then it was '84—'85 where the virus was first isolated, announced by HHS, probably isolated in Paris first even though Gallo may have shared an equal

time, but I also—finding it is lentivirus from his lentivirus lab which later turned out both Montagnier and Gallo to have found HIV. So, and so by '85 or so, now '82 is when it became AIDS, by '85 it became the human immunodeficiency virus renamed from HTL3, human T-cell lymphocyte something 3, whatever HTL was, uh, human something, TL, lymphocyte, thrombosis, something lymphocyte, T-lymphocytes or something. But that got renamed into human immunodeficiency virus.

Sharpless Now, how much was the work preventing it—keeping people from getting it, and how much of it was finding a treatment for it in your division?

Cates (speaking at the same time) Well, our division had very little to do with treatment, and treatment was really something that was evolving within a medical sphere, but not really within a public health sphere. We were really, at that time, doing mostly prevention, it was general community education messages, working with peer groups, working with high risk groups, making sure that the main high risk group in this country which was gay men who by this time were way ahead of public authorities—one interesting thing about epide—being an epidemiologist in this field is that well before we had a virus, the virus culture, you know, through a variety of epidemiologic studies we knew how it was transmitted, what the correct interventions were. I mean, we were saying, Use condoms, well before we had found HIV, we were saying, Don't share needles, because it had a lot of the pathogenesis aspects of hepatitis B. So, I mean, we were coming out with all of our public health recommendations, not based on the agent, but based on the epidemiology.

Sharpless And it all fit into work that you had done in Nuremberg.

Cates Well, and you're right. That's a, boy, that's a good pickup, and then that led back to at least an anamnestic response to having been involved with a lot of the STD work, obviously we didn't have HIV in Nuremberg from '72 to '74, but it led back to a lot of the key processes that I had overseen in Nuremberg, you're right. Which was fun, and even the shared needles working with drug users that I'd done in Nuremberg with hepatitis B was also another route of infection that we were finding was a mechanism for HIV as well.

Sharpless Now, how much, as division director, how much were you able to keep being an epidemiologist and how much were you managing this rapidly expanding—

Cates (speaking at the same time) Well, yeah, um, you know, I had the luxury of having some wonderful people as my colleagues in that division who did—who knew five times—no, more, not five, five hundred times more than I did about bringing funds in, managing those funds, getting them out, getting them spent correctly, auditing them properly, asking for more. And they'd sort of, you know, trot me up in front of Congress, and I could say the right things, but most of my job was providing the vision and the leadership. We changed our name from venereal disease to sexually transmitted disease in part to connote the expanding range of syndromes. Chlamydia hit the scene, herpes, human papillomavirus, we realized that hepatitis B was sexually transmitted, we were finding new organisms all over the place. It no longer was a typical venereal disease, gonorrhea and syphilis group. And so we

changed our name to the Division of STD, and then in '85 where we started getting this massive increase of HIV funds to support voluntary counseling and testing going from about, at that time, probably eighty million up to two hundred plus million. We changed our name to the division—in '85—the Division of STD/HIV Prevention, and the other group in the other center was the Division of AIDS, I think, it's DHA it was still. And that was the group that was doing the primary scien—we were doing the money flow, the management, the relations with states, getting money out for services. They were doing the science, counting the number of cases, looking at risk factors, investigating outbreaks, these types of things.

Sharpless How interested were people in general in HIV?

Cates Um—

Sharpless Was it something that was just gay men's problems or—

Cates That's a good question, and it had more to do with interesting—how do we get, number one, I guess, the politicians interested, and as long as it was being seen as an isolated event occurring only in a—that sort of stigmatized group already, there was not a lot of interest. And, you know, there was some statements attributed to Reagan, interestingly just flared over the last year with this CBS, non-CBS movie made of the Reagans, but, you know, it had him saying, "They got what they deserved," and so on. But it was, you know, there was a big segment of American society, including those serving the heterosexual side of American society who says, This is tragic for these people, but it's not going to spill out into the rest of society. It's just staying as a cloistered, sexually transmitted disease within a, you know, within a sort

of closed network. And so there—that was part of the reluctance of the family planning group to get into it. Interestingly, the person who was the family planner who really, in my view, had been the most assertive on saying that this is a global health problem, this is something that's serious, this is spread sexually the same way that unintended pregnancies are, from the reproductive health field is Malcolm Potts who is the second president of—oh, you've interviewed him—the second president of FHI [Family Health International]. And he was—talk about population pioneers, I mean, in every way he is pushing the envelope, and he—the reason that FHI is so much into HIV these days is directly measurable back to Malcolm's leadership, realization of what the problem was and going for dollars saying, Look, FHI is clearly a group that has the international reach and can get the job done et cetera, et cetera. And he just wrote the first grant and then continued to, uh, continued to advocate for FHI's further involvement and for the whole field. I mean, he was and, you know, he's still doing it today. He's an amazing guy.

Sharpless Yeah. He's really very high energy. Well, what else about your time as director of the STD/HIV?

Cates Um, well, you know, the integration of HIV services into STD services was by far the biggest issue, and how was that done because it, just like in today's world globally, it became the engine driving the train for resources. The question then was how did you optimize your other resources and how did you build the little of the synergies between where the resources were growing and where they were needed but not growing. And, you know,

spent a lot of my time doing that and looking at how voluntary counseling and testing should be integrated, then how this first AZT [azido-deoxythymidine] treatment would act as a stimulus for voluntary counseling and testing because there were some things people could do about it. Anyway, it was a, you know, it was an exciting time, and the other thing that I was really happy about in that division is we really had not had much of an epidemiology base, I mean, it was either clinicians who could do randomized clinical trials or it was public health advisors and there wasn't really this middle ground. So part of the deal of my coming back with Paul, a part of my deal with Bill, although I didn't realize how important it was at the time, was saying, "Look, if I go there—up until I got there the division did not partake in the CDC EIS system, it would always hire its own people directly. I said, "If I'm going there, I'm going to insist, Paul, that you at least put one position in the EIS and let me recruit for at least one position to work for me." Because I thought it was very important to bring this whole outside predominantly funding structure into the inside of CDC and allow it to participate in the whole farm system exercises, which would get their vision of STD more widely known within CDC and would act to encourage our scientists to compete for these wonderful human resources at CDC called the EIS. And so that—by the time I left, I think we were getting four or five EIS officers. You know, started with one, then gradually building up and getting four or five EIS officers to that division.

Sharpless Now, how much were you able in that division or how much did you want to look at the worldwide picture of HIV/AIDS or how much did you—were

you limited to the domestic sphere?

Cates Yes, well, two things. Number one, the CDC mission was entirely domestic. In fact, there was even a proscription from doing much with any of this STD money globally so we had to hook or crook into other areas, but we're clearly interested. It became obvious by mid-1980s that—in fact, I have a quote on the door of my office, you probably didn't see it, that I had in *Newsweek*. Most of the things you read that you quoted in the past you cringe about, but this one turned out to be tragically prophetic. It was something like—it's on the door, you know, any—this is *Newsweek* 1986, so almost twenty years ago. It was on AIDS and global health, and I said, "Anyone who has the least ability to look into the future is going to see that this is a disease the likes of which mankind will have never seen before." And those—that, you know, that was when there were twelve thousand cases reported, twelve thousand. We're now at sixty million having occurred, twenty of—twenty million of whom have died, but forty million are here. This was at twelve thousand cases so that was a tragic prediction that came true.

Sharpless Why did you think that at the time?

Cates Well, again, just because of the capacity for spread, the clandestine nature of sexual transmission, um, the attacking of the immune system, the delay—the latency between the time you become infected so you can be spreading it for years and years before you start realizing symptomatically that you're going downhill, and just the idea that it was very scary and had that capacity to possibly get burgeoning out of control. Meanwhile Peter Piot, a relatively

young Belgian physician working in the Congo, started his own group that subsequently—research group—subsequently flourished named Projet SIDA, which is Project AIDS, in the Congo, was writing about its international implications, and, you know, the rest is history. Peter goes on to become, except for one vote, director general of WHO and certainly director of UNAIDS [Joint United Nations Programme on HIV/AIDS], wonderful guy and a close friend during the decade of the eighties when he was forged as an STDer, worked in King Holmes's lab—another great mentor, and another person who really is a leader. His name is King Holmes. You're not going to see him in the population leadership group, but he's in the sexually transmitted disease/HIV leadership group, and is a forward thinker and a person who recognizes the role of contraceptive choice in some of these key issues. But, at any rate, that's a digression in saying that—what was I saying about King, I forgot. But anyway, it was a—

Sharpless Something in connection with the Belgian doctor.

Cates Yeah. Peter Piot had trained in King Holmes's lab, that was it. Good for you. What a good memory. Um, and Peter went on to be head of UNAIDS as I said.

Sharpless Okay.

Cates But he was probably among the first ones to recognize that—that I remember, to recognize the international scope of HIV disease.

Sharpless What were the most satisfying parts of your time there in the STD/HIV division?

Cates Well, I think, I think number one just the opportunity to learn a whole new

side of CDC, the opportunity to develop an increasing array of young professionals with epidemiologic skills contributing to the STD group. Now, STD is predominantly staffed by people who've come up through the EIS. Um—

Sharpless A different kind of science.

Cates And a totally new science. With the one dealing with unintended pregnancy, endocrinology surgery, the other dealing with sexually transmitted diseases, immunology and microbiology. And so, I mean, whoa, my head was spinning, and yet it offered a terrific opportunity to learn a new field, spend nine years doing it and be working with—among the most impressive people I've worked with in a managerial field in my life. One of which, Gary West, I recruited to come up here too.

Sharpless Oh, well, that's a question. How did you get Grimes and Schulz to come to STD?

Cates Well, we had openings. They were, you know, for a variety of reasons, looking for change—I think it's a human condition—and I wanted to bring their mind-sets plus their friendship back into the fold. And so we had openings for both and we actually recruited both at the same time, and they both came at the same time. So, and depending upon which science you valued most, some said, Boy, David was the greatest thing since chopped liver, and the others said, Boy, Ken is the greatest thing since chopped liver. And they both were great. David subsequently, you know, David's an OB-GYN and he actually does abortions, he trains people, he's the best mentor in the whole world, and is—no matter what med school he's associated with,

he's always voted as the best teacher. And—but he was feeling increasingly harnessed by the Reagan administration, and we had—it didn't bother me as much—but we had to sort of compromise how we said things, and he actually had to change his affiliation on one of the articles that he wrote from, uh—not FHI—from CDC to Emory, and he just got fed up with it. So around mid-eighties, he went—was recruited by the L.A. OB-GYN department, went there with Dan Mishell [Daniel R. Mishell Jr.], had this opening up in San Francisco General, was on the West Coast probably about twelve to fifteen years. Meanwhile, I had moved to FHI and we had some openings here, and he's from North Carolina so it was a natural mix and he was just getting tired of managed care and trying to make balanced budgets in academic medicine. It wasn't what he was strong in. So I was wooing him like mad, but then I remembered getting nowhere with my active wooing, went into hibernation for awhile, and probably about six months into hibernation, he calls, "You still have things there? (Sharpless laughs) I've got sick"—well, he didn't say this, I mean, but he said, "You know, I would really like to come and spend the rest of my life doing work like FHI does." So that was great, I mean. So he came and, meanwhile, I knew Ken was about to retire. I said, you know, "Come to North Carolina, take a look at it. It's a lot of fun, and I think, I think you guys will really look at it as a family-friendly area." Which they did, and it was.

Sharpless Well, after you left STD—well, maybe not after you left, let's see—the Division of Training for the Epidemiology Program Office?

Cates Yeah. Well, that was interesting. I had been at the STD/HIV division for

over nine years, longer than I'd been with the family planning division, and, you know, after awhile, I realized when you're getting to make your annual progress reports and the sort of milestones during the course of the year that they were becoming relatively rote. So I—I just started looking around, wondering what was next and so on. And it was just at that time that a guy named Steve Thacker, who was by this time replaced Carl as director of the epidemiology program office, had posted a position for someone to be director of its training division which involved overseeing, like Carl had, the EIS and the preventive medicine residency and a few more things. And so, you know, I said, You know, this looks like fun. I'd like to see what academia is all about, this is the closest CDC has to academia. So in—gosh, I'm trying to think of exactly when—I think in April of—do you have it down there, April of—

Sharpless '91.

Cates '91. After a weekend of thinking it over, announced that, yes, I would take this job in the division of training where I lasted until 1994. And then coming here which is—and I liked that. I liked the EIS. It was fun being part of it. The fellows, the EIS officers, were great, but I got, to tell you the truth, I got very tired of the sort of academic drag. I mean, you spent three months of the year just doing intensive interviews, dawn till dusk, people were applying for the EIS. Then you shifted into—so you were director of admissions for part of the year. Then you shifted into director of curriculum development because you were teaching the courses. Then you shifted into the alumni office because you were always contacting all these EIS, old

EISers to figure out where they were. And then you became the career counseling office because this cohort was about to get out and what were they going to do with—I mean, there was constant moving, and that's life in academia. I mean, you're constantly mentoring, bringing new people on, sending old people off, doing your own—but it got—it was—it got to be a bit of a bore to tell you the truth. Plus, I got to—and I missed, I realized I missed being—it was—this was a process area where you were sort of bringing people in, looking at their talent, trying to judge how good they'd be, and I missed the real content specialist part of me. And I missed either being an STDer or a family planner and asking questions and going after knowledge. And so I had reached twenty years. My daughter, younger daughter, was graduating from high school, which meant I was, you know, sort of professionally free in addition to—I mean, personally free in addition to being professionally free. And we started looking around. We looked at various academic jobs in addition to FHI. I just kept coming back to FHI as the—as a group that had bridged the two fields of my career, plus offered an area to grow which—because I'd never been international. And so now I've been able to merge this family planning, contraception, STI group, and bring it—learn a lot about global and "globalness" and global research. And it's been a blast. Ted [Theodore M. King] actually brought me on with the idea of really bolstering the scientific expertise here, the easiest way to do this is to go out after Grimes and Schulz. And—

Sharpless Let me turn the tape right—

Tape 2, side 1, ends; side 2 begins.

Sharpless You just talk and I won't ask questions. (laughter)

Cates Oh, no, no. No, you're great at getting things—

Sharpless (speaking at the same time) Okay. So you decided to come to FHI and move from Atlanta to Raleigh-Durham.

Cates (speaking at the same time) To Raleigh-Durham. And, you know, by this time our younger daughter had chosen to go to Duke, thinking she was going to get away from us, only to have mom and dad arrive at her back door again, "Oh, no! What are you doing here? I just came away to get away from you." (laughter) But, anyway, we loved it. We were at—anyway, so came here and initially was called Corporate Director for Medical Affairs or something, and really did that for a couple of years, became senior VP for the same thing.

Sharpless What does that mean? What did you do?

Cates Oh. That's a good question. I, um, basically organized two key aspects of FHI. One was working initially with Ted and JoAnn Lewis, who poked her—was the person who poked her head in the door, to oversee our contraceptive technology research cooperative agreement, which is the big thing that sort of supports North Carolina. And then also got FHI into the HIV prevention trials network which is a whole NIH [National Institutes of Health] funded database. And I worked with our younger crew to write R01 [research project] grants, I worked at—and tried to broaden the—and diversify the resources coming into FHI.

Sharpless Okay, how much had you done that at CDC?

Cates There was a big change because, you know, you go from being the donor to

being the donee, and then your conscious—your whole focus changes. You're raising money from the type of agencies that you had been formerly staffing and giving money out from.

Sharpless So who were you looking to for funding?

Cates Well, USAID [United States Agency for International Development] is our big funder from two funding streams with Duff [Gillespie] in the pop section if you want to think of it that way. And then there's a whole section that's HIV, and the HIV services—if you draw family planning as a two by four table—if you draw FHI, I'm sorry, as a two by four table and you have family planning, reproductive health in one wing—two by two table—you have STD/HIV in the other, and then you have research and you have services. So you have four cells.

Sharpless Okay.

Cates Um, FHI has activities in all four cells: reproductive health research/services, HIV/STD research/services, and it was fun to sort of crosscut both of those. The one thing I'd never really been a part of was a reproductive health services group, and that's not a huge activity of what we do. We don't go to these international activities and—but we do a lot of information dissemination, we do some operational research on pilot projects and so on. So, but coming here allowed me to, um, to bridge the two fields of interest. And immediately a lot of my first couple of years was looking and evaluating the literature that was indicating what do the various contraceptive choices do as far as increasing or decreasing the risk of STIs, decreasing if it's male condoms, increasing if it's syphilis or herpes in HIV.

So—or increasing perhaps if it was the IUD inserted—within thirty days of insertion because of some of the bacteria that's carried up into the uterine cavity, or some, we're fearing, increasing hormonal contraception because it—for a variety anatomic—speculative anatomic reasons, it may make a woman more susceptible to even acquiring HIV infection from a partner, we don't know, big study out, about to be finished.

Sharpless So when you came in, they said they wanted to ramp up the science that—

Cates Yeah, well, I mean, Ted was saying that, you know, we were about to go into a new funding cycle, it was really important that—he feared, luckily it didn't materialize last time, it could this next round—go head-to-head with one of the big academic groups, and the only way we'd be able to hold our own was to have a cadre of world experts in this area. So, again, when we had the opportunity to go after Schulz and Grimes, said, That's the fastest way to build a, you know, a quality research team, is to go after the free agents, the superstar free agents that you're able to attract. So Ken came up here, and David eventually came back here from San Francisco where he was.

Sharpless Um-hm. Now, how did you get yourself up to speed on the international components?

Cates Well, again, just like I did everything. I mean, I—by OJT, on-the-job training. I began learning what USAID grants were like, I began learning what NIH grants were like, traveled increasingly to international settings, went to seminars that my colleagues were giving, um, no magic bullet of—just going out and working there for a year in order to gain the experience. It was all by hook or crook or psych visit or whatever. That's—and by virtue

of the mission of this organization which by, you know, one of its three names is international, and to improve—what is it—understanding, knowledge and a knowledge understanding in lives, I'm pretty sure, I'd better know our mission. (Sharpless laughs) But, you know, it's gathering information to generate knowledge and then applying that information to improve lives.

Sharpless Um-hm. Now, you were selected as president in 1994.

Cates No, I was—in 1994 I was the senior vice president for biomedical affairs.

Sharpless (speaking at the same time) Oh, I'm sorry, that was—right, yeah. Sorry about that. Ninety-seven.

Cates (speaking at the same time) And then president in '97, right. And—

Sharpless How did that come about?

Cates Well, Ted decided to step down and, you know, there was an—at least an internal competition, and I interviewed for it. And actually, it was interesting, FHI at the time was lucky to get a two-for-one because Ted stepped down, the former—the CEO had been the former chair of the board, and a person who used to work for FHI, but had been very successfully spun off as a part of FHI, named Al Siemens—what we had done is create a for-profit that we sold to another group, created an endowment for FHI. Because we sold it, Al had to go out for five years, you know, noncompete, stay with the company type thing. As soon as he—Ted was stepping down at about the same time that Al was coming available as, you know, to come back to FHI. And the board wanted to replicate the system again. The thing is when we had started out and done it the first time, there were like two or three what

we call CROs—do you know what those are? Those are contract research organizations that compete for the outsourced work from pharma companies and biotech companies to do their trials with whatever they need from regulatory to monitoring to stat to whatever. And they're service organizations, mostly serving large pharma—anyway, the large drug group. And so the board wanted to try to do this again, brought Al back to head up that unit and to be CEO of FHI, and then I was selected to be president of FHI. So I worked for Al in the hierarchy. He was mostly consumed with trying to start this new thing that became PharmaLinkFHI, that he's been very successful with. We've turned a profit a year before we thought we would. And I was, you know, selected president of FHI where I was sort of overseeing most of its activities.

Sharpless Well, in our last few minutes, what are you proudest of here at FHI?

Cates Boy, at FHI, I think it is what you have down there, the integration of family planning and HIV. I think what we've been able to do is take an organization that was largely funded by, um, USAID dollars and now we're getting an equal amount of NIH dollars and about half that amount foundation dollars. So we've grown the resources. Probably the most, I mean, the thing I'm most proud of is just like to think that I've increased the excellence of the scientific product here in terms of the quality of analysis, the quality of inferences, the impact that we have on international guidelines. And you do that by recruiting top people and emphasizing the type of product that you're going to accept coming out of the organization. So, raising the bar on excellence, increasing resources, broadening the field to—

the research field—to HIV research, growing the organization in new directions, initiating treatment as part of an HIV prevention portfolio, you know, sort of doing what leaders are supposed to do, which is to have strategic vision, to recruit talent to the organization, to generate resources to support that talent, to represent the organization on outside groups so that it gains some technical visibility, to publish, I mean, what you sort of do in this job. And it's a fun group. Just for—I'll tell you a story that literally happened yesterday, and it sort of, I mean, there were—every day something happens that tells you what—why it's fun to work here. But we were, uh, we're dealing with, let's call it polarized thinking in some aspects of the sexual and reproductive health arena. We're trying to find common ground with some of the groups that are at least the most reasonable on the slightly right of center side of things. And I was listening to a seminar that was at Morehouse College called "Finding Common Ground" that had two sides of the coin, and one guy who's a friend of mine that we—his name's Joe McIlhaney [Jr.] who sits on all the President Bush boards and is a friend of President Bush, an OB-GYN from Austin who got to know him, but is a big abstinence-only person, and a person who is sort of very skeptical of condoms and—but a scientist who will listen to evidence. But he was quoted as saying that mutual masturbation is unhealthy by nature, and I'm thinking, Whoa, because we were talking about, you know, the alternatives to the—you know, what does abstinence mean? Is it only penis and vagina sex or whatever. And so mutual masturbation, he said it's inherently unhealthy. And I'm thinking, Hm, c'mon, you claim to be an evidence-based guy. Show me the evidence for

this. I mean, I want to really see it. And so then a colleague and I were sort of standing in the hall yesterday morning, I mean, totally engrossed in trying to figure out what would be the best design of a trial to test whether or not mutual masturbation was healthy or unhealthy, and, you know, who do you select, and how do you teach it, how do you, you know, follow it for adherence and so on. I mean, and we were, I mean, it was truly not a prurient discussion at all. It was a scientific discussion about what type of intervention would work. And one of our bright young people sort of comes bouncing in the doorway, first thing at work, and comes past us, does a doubletake as, you know, each of us are sort of talking at my volume of talk about this, and, you know, (makes gargled sounds). "I love coming to work at this place!" (Sharpless laughs) And it was just—it was really—I said, you know, that scene sort of encaptures why it is fun to work in a place like this that you're, you know, you're trying to deal with what is healthy sexuality, healthy sex. My vision for the future is how do we create a world—I sort of start off some of my talks with, you know, in the 1900s we had a world that had a fatal, incurable, worldwide infection called syphilis. And everybody was saying, Why don't we have a cure? Why don't we have a cure? Well, we have a cure, and by the early 2000s we have a world that has a fatal, incurable, worldwide infection called HIV. A cure is not going to do it, and we still have syphilis too by the way. What's going to do it is a society that is able to talk about sex in a healthy way that has it treated just like exercise for—wellness in eating, exercise, wellness in avoiding, you know, tobacco products, and we need the components taught of what is really healthy

sexuality to have it talked about. And it's only through that that we're going to hopefully be able to allow people to take measures to prevent the consequences. It shouldn't be eradication of the consequences, unintended pregnancy and STIs, it should be promotion of wellness and healthy sex, and that's noncoercive, and it's honest, and it's non-exploitive, and it's protected, and it's dah-dah pleasure. And, but, you know, we have this puritanical heritage where we're—it's not hardly even expected to be pleasurable, and if it is, you can't talk about it. So—and how do we create an enabling environment that allows us as human beings in this country to get over hang-ups, to be able to have this, you know, totally objective discussion about mutual masturbation and not feel that it's something that you really have to run behind a door and do? I mean, we were literally oblivious to what we were discussing in the hall. And it's that vision of a healthy sexuality and a healthy—a world of healthy sexuality where you don't have gender imbalance, where you don't have, um, you know, coercive sex in any way, shape or form, where you don't have judgmental sex and such, I mean, where people are knowledgeable about its risks and then taking measures in order to protect those risks as part of a healthy mind-set. I mean, that's ideal. Will we get there? Let's hope.

Sharpless Well, that's a great place to stop. Thank you. You've been so generous with your time.

Cates Well, thank you. This has been really fun, and good luck on the rest of this project. I'm really, I mean, I'm excited—I'm honored by being part of it and excited to be part of it and glad that the different organizations that I've

been part of also will play a role in this evolution of the Pioneers Project.

Sharpless Terrific. Thanks.

end Interview 2