

GARTNER PEDIATRIC HISTORY CENTER

American Academy of Pediatrics

ORAL HISTORY PROJECT

Doris L. Wethers, MD

Interviewed by
Joseph Dancis, MD

February 26, 2002
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Preface	i
About the Interviewer	ii
Interview of Doris L. Wethers, MD	1
Index of Interview	29

PREFACE

Oral history has its roots in the sharing of stories which has occurred throughout the centuries. It is a primary source of historical data, gathering information from living individuals via recorded interviews. Outstanding pediatricians and other leaders in child health care are being interviewed as part of the Oral History Project at the Pediatric History Center of the American Academy of Pediatrics. Under the direction of the Historical Archives Advisory Committee, its purpose is to record and preserve the recollections of those who have made important contributions to the advancement of the health care of children through the collection of spoken memories and personal narrations.

This volume is the written record of one oral history interview. The reader is reminded that this is a verbatim transcript of spoken rather than written prose. It is intended to supplement other available sources of information about the individuals, organizations, institutions, and events that are discussed. The use of face-to-face interviews provides a unique opportunity to capture a firsthand, eyewitness account of events in an interactive session. Its importance lies less in the recitation of facts, names, and dates than in the interpretation of these by the speaker.

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ABOUT THE INTERVIEWER

Joseph Dancis, MD

Dr. Dancis graduated from the St. Louis University School of Medicine in 1938 and then returned to New York City for housestaff training. His residency was interrupted in April 1941 by the U.S. Army. On discharge, he resumed his training at the NYU-Bellevue Medical Center. Except for 5 years in private practice, he remained a member of the full-time faculty at NYU ever since.

Interview of Doris Louise Wethers, MD

DR. DANCIS: This is an interview of Dr. Doris L. Wethers conducted by Joe [Joseph] Dancis in February 26, 2002. We are in my apartment on the East Side of Manhattan looking out at the Empire State Building. Good afternoon Dr. Wethers.

DR. WETHERS: Good afternoon Dr. Dancis.

DR. DANCIS: I have in front of me a list of topics which I plan to cover with you, but this is not intended to be a question and answer exercise. I have no doubt we will digress often given your many years of experience, and I look forward to those digressions. Dr. Wethers, tell me where you were born and about your family and early life.

DR. WETHERS: I was born on December 14, 1927 in Passaic, New Jersey, which is, as you may know, an industrial town. My father, Dr. William Wethers, graduated from Howard University College of Medicine in 1924. He came to Washington, DC, from Charleston, South Carolina, which was his home. I don't know too much about his early years. He did what many students at Howard did, and still do, which was to find himself a beautiful Washington belle and marry her. My mother, Lilian Wilkenson, was from Washington. She was a school teacher and graduated from Wilson Normal School. They married during or maybe right after my father's internship year. In those days, most physicians finished a year of internship and then hung out their shingles as family doctors. He came to Passaic, New Jersey because New Jersey then was a very industrial state. They had a lot of blue-collar workers, particularly immigrants from Poland, and there was a big Polish population at that time in Passaic. He moved there so he could start a practice, and he stayed there until the Second World War.

I was born in Passaic in 1927, which was a couple of years after they moved there. I don't have too sharp a memory of Passaic, but I remember the house where we lived and a beautiful lilac tree in the yard — I have loved lilacs ever since then. But my parents didn't get along. They were divorced about 5 years later in the early 1930s, when I was about 5 or 6 years old. Divorce was unusual in that day and time. I don't know too much about what happened at the time they split. I think my sister, Agnes, probably knows more and felt it more because she was 3 years my senior.

I went to kindergarten and maybe part of first grade in Clinton, New Jersey. The reason I went to Clinton public schools was because I was born in December and my mother wanted me to start first grade immediately and not lose a year, and Clinton would take me. Then we came to New York. I think my mother had cosmopolitan ideas. She wanted to leave New Jersey,

so we moved to New York. That time was the beginning of the Great Depression between 1929 and 1933. I went to grade school, high school and college in New York City. My mother liked to move. She was always moving because she wanted to get a better apartment and wanted better schools for her children. Then, the only way you could move to a new school was to get a new address. So, she would get a better address, or she'd use a friend's address. Since she was a teacher, she wanted to make sure our schooling was good.

DR. DANCIS: She was a teacher?

DR. WETHERS: She got her teaching certificate from Wilson Normal School in Washington. Normal school was similar to 2 years of college. You were equipped and became certified to teach elementary school after you finished normal school. It was like a junior college, so she knew about elementary education. She may have taught a little while in Washington, but I don't really know.

I lived in Washington Heights in what is called Sugar Hill. It was a changing neighborhood and was largely Black, largely African American. It included St. Nicholas Avenue, St. Nicholas Place, Amsterdam Avenue, north of 135th and 145th Streets, just north of the City University of New York [CUNY]. That area was called Sugar Hill because it was up on a hill rather than down in a valley where most of the crime was. I lived there for most of my life. We had several addresses around there, and I went to a couple of different elementary schools. The major one was PS 155 near St. Nicholas Avenue. When I finished there, I went to Edward Stitt Junior High School, IS 164, which was on Edgecombe Avenue. It was a nice area geographically. I have many nice memories, and some that were not so nice. Because of the Depression we were very poor, as many people were.

DR. DANCIS: How did your mother get by?

DR. WETHERS: Well, she worked. She always worked. She was not teaching then because we were in New York and she had only been certified in Washington. She had a variety of jobs. One that I remember well was when she worked on the city buses. She would go on the bus as an inspector, watch, take notes, and make sure the drivers were doing the right thing. Another of her jobs was as a keypunch operator.

My father was always very much involved with his children. He would come over at least once a week from New Jersey. He was still in Passaic and he stayed there until World War II, but he had a few patients in New York. He would pick us up, and we would stay in his car while he made house calls. Those were house call days. Of course, he contributed to our family, but family doctors didn't make too much money then. Many people did not have

a job, so there was not a lot of money. You can read about how family doctors would be paid in-kind and not necessarily in money. So, it wasn't an easy time, but I don't have terrible memories of my childhood.

DR. DANCIS: Who took care of you while your mother worked?

DR. WETHERS: By the time we moved to New York, my sister Agnes and I were both in school. I was between 5 and 6 and my sister was old enough, so that when we came home she would look out for me. I remember staying home after school until my mother got there. My sister and I would pitch in. We would shop, wash, clean and cook. Just before the War, my mother got a job at the New York Public Library. At that point we were living at 160th Street, which is right across the street from one of the branch libraries at 160th Street and St. Nicholas Avenue. It's still there. She was near our house so she was able to come home for lunch and whatever. High school was okay. I remember a few outstanding teachers. I went to George Washington High School. In 1999 it was divided into 4 different academies, which had an excellent reputation. It's fallen on hard times since then, but it had a very good reputation. Again, my mother looked around and found the best school and said, "That's where you will go."

When I finished high school, my sister had already gone to college. She went to Queens College, which as you may know is a part of the CUNY consortium of colleges. This was something my mother suggested. She said, "Well you know it's a new school, it has a nice campus, and it's coed. You would have opportunities." So, I followed my sister to Queens College, which I loved. It was a very new school and a very small school at that point, with a beautiful campus. Of course, it's changed. Now it looks like a school that I never went to, because it is so large.

DR. DANCIS: You commuted from Manhattan?

DR. WETHERS: Yes, I commuted from Manhattan the whole 4 years. I just took the subway, the No. 7 train. My college years were fun.

DR. DANCIS: You had quite a mother.

DR. WETHERS: Oh, yes. She was on top of things. My mother's family was very close and still is. She had 3 sisters and a brother, and they all kept in touch, even though they were in Washington. All her family were educated. My uncle went to Syracuse University. The others went to Miner Teachers College that was absorbed into the University of the District of Columbia in 1977. One of my aunts, my godmother, was a teacher of math, and she went ahead and got her baccalaureate. The oldest sister was an artist.

DR. DANCIS: Where did all this family drive come from?

DR. WETHERS: Well, I guess from living in Washington. My mother's father was in the post office which was one of the few jobs available. Her mother taught, but not for very long, and when she married she didn't teach. But there wasn't any question we would get educated. Many of the friends I made were classmates of my father's. I still am very close with many of them. One is a doctor in Morristown, New Jersey, another one in Paterson, New Jersey. Some of them are still here on the East Coast and we are still close friends. So, it was a good peer group.

DR. DANCIS: But they were in New Jersey, you were here.

DR. WETHERS: Yes, but New Jersey is not that far. I'd take the PATH (Port Authority Trans-Hudson) and go over to New Jersey, or my father would drive me. I had friends in New York too, so I had friends all around. All in all, it was good growing up. My sister, Agnes, lives in New Haven Connecticut, and she's always been a very nurturing person.

DR. DANCIS: How did your sister get to New Haven?

DR. WETHERS: Well, that's another interesting story. She started dating a young man, who was the only child in his family. This was just before World War II. He knew he was going into medicine. He went in the United States Army, and when he got out went to Howard and Howard Medical School. Like my husband, a lot of his education was possible because of the GI Bill of Rights. Without that it would have been very difficult. When he finished medical school, he came up to Harlem Hospital Center. He did his internship and residency in internal medicine, and then looked around to see where he would practice. Dr. Carter Marshall, one of my father's classmates and good friends, was in New Haven, and he said, "Richard [Timpson]," (that was my brother-in-law's name) "why don't you come up and join me in my practice." So that's how he ended up in New Haven, and he's been there ever since. He lived there and had 6 baby boomer children. He's retired now, but they still live in New Haven.

DR. DANCIS: When you were at Queens College were you premed?

DR. WETHERS: Oh, yes. I was premed.

DR. DANCIS: How did you decide? Was it because of your father?

DR. WETHERS: Probably. I've wanted to be a physician ever since I can remember. When I was growing up my dolls were always in sick beds. I don't think my mother was thrilled with the idea. She said, "Number 1, you go to college to get educated. Number 2, you have to have an education to be

self-supporting.” In the Black community, especially in the middle classes, it was felt that you needed to be educated. But I shouldn’t say just the Black community, because I think in all classes women are encouraged to be able to provide for themselves. You may have heard that old Billie Holiday song that says, “God bless the child that’s got his own. Mama may have, Papa may have, but God bless the child that’s got his own. Don’t you count on anybody else. You be sure you can do it yourself.” So, there wasn’t any question that I would go college.

I don’t know how happy my mother was with the idea of my going into medicine, but I’ve *always* wanted to. I’m sure a lot of it had to do with my father, because he was so beloved by all of his patients and he obviously loved medicine. But he had one problem with my goal and asked me, “Are you sure you really want to go into medicine?” He was very concerned that I was going into it for the money, because this was a long time ago and you didn’t think about money the way you do now. Maybe I had looked at it through his eyes, since he had many classmates who didn’t want to go into medicine, but were told they had to do it because then they not only had a degree, but also then they didn’t have to rely on being employed by someone else. They could hang out their shingle and make their own money, which was one of the things we, meaning African Americans, were pushed to do, so they wouldn’t be dependent on somebody else for employment. My father had many friends who were pushed into medicine. Some hated it and some others just didn’t like it. One of his friends was Rudolph Fisher who was an author in the Harlem Renaissance. He died young. He was one of the people who practiced medicine because he had to live, but what he really wanted to do was to write, and he wrote very well. There were many people like that. They had to do something to support themselves, but medicine was not their first choice. This isn’t unusual, as you know. Even now there are parents who push their children into careers because they think they should do it or because they’re frustrated themselves. When I assured my father that I wanted medicine because *I* wanted it and I always did, he was fine with my choice.

At Queen’s College, I was premed from the start, and I had 2 very inspiring teachers. One was a German expatriate named [Alfred Francis] Huettner, and the other was Donald E. Lancefield, whose wife, Rebecca [Craighill] Lancefield did important research on the streptococcal bacteria.

DR. DANCIS: She was very famous.

DR. WETHERS: Yes, exactly. Her husband was my professor of biology and he did genetic research at Queens College, but she worked at the Rockefeller Institute for Medical Research, that is now Rockefeller University. Both Dr. Huettner and Dr. Lancefield were very supportive of my ambitions for medicine, particularly Dr. Huettner who encouraged me. I

think he might not have had quite as much of the baggage a lot of the Americans did since his background was German.

DR. DANCIS: How did you choose the Yale School of Medicine?

DR. WETHERS: I applied to several schools including Yale, Howard [University College of Medicine] and a couple of the New York schools. New York Medical College, I think, would have accepted me, except I got Yale's acceptance first. I wanted to go out of town, but not to be too far, so Yale was ideal. So that's where I ended up going. I'm sure I could have gotten into Howard because I had a legacy from my father and my mother and my marks were good, but Yale was my first choice and I went there.

DR. DANCIS: How did you support yourself through medical school?

DR. WETHERS: One answer is that it was much cheaper then. Another answer is because my father was drafted in World War II. I think that he was in the army reserve because he was drafted. He was on active duty for almost 4 years. He was stationed at Fort Huachuca in Arizona. Toward the end of the war, he was sent to the South Pacific. This was terrible, because he came back in broken health. When he came back, he decided he would leave Passaic because he hadn't been there in a number of years. So, he moved to New York and opened an office in a building on Broadway and 152nd Street that he later bought. It was postwar, so things were much easier.

He had patients, and he was one of the original Health Insurance Plan of Greater New York (HIP) physicians, that gave him a guaranteed income. In addition to private practice, he was looking for something else to augment his income, so he became one of the charter physicians of one of the HIP groups, which was a block from his office on Amsterdam Avenue. That was an opportunity for a black physician because it not only gave him some money, but it gave him other contacts. In the 1940s, when he opened his office, a black physician couldn't get on the staff of any hospital except for Sydenham Hospital. That's since changed. There were limited opportunities for black physicians. HIP was looking for well-trained physicians they could hire, including blacks, so it was a good combination. HIP was a group that the medical establishment as a whole looked down on as communistic or socialized medicine. Of course, things come around as they always do, and now we have Health Maintenance Organizations. HIP was really an early version of an HMO.

My father paid for all of my maintenance, transportation and for my room in a dormitory at Yale. I got a scholarship from the Jessie Smith Noyes Foundation which paid most of my tuition. After the first year, the tuition went up, but they increased the scholarship so I had tuition covered for the four years. Students now come out with so much debt, but I didn't have any

debt, which was really a blessing.

DR. DANCIS: How did you like Yale? Did being both a woman and an African American constitute any problems ?

DR. WETHERS: I liked my time at Yale very much. There were very few overt problems. At least I recognized nothing that was out-rightly racist. The class was small. We had 65 in my class, many of whom were veterans of the war. We had 9 women out of our class of 65, which was a record for Yale. They usually took about 4 or 5. Now medical schools have more than 50 percent women, but then 9 was quite a record. After our year they went right back down again. Of the 9 women in my class, only one, who married a classmate, didn't graduate. Another girl, who was my cadaver mate, was from Little Rock, Arkansas. She approached me on the second day and asked me to be her cadaver partner. She married a classmate and they live in California. One of the girls, Frances Feld, was a Brooklyn College graduate, so we had two CUNY graduates in my class, Frances and me. She married a classmate and she has practiced for a long time.

All of the women medical students stayed in a house that was also used for women graduate students. This had a kitchen, so we were able to cook our own meals and occasionally have classmates over for dinner.

DR. DANCIS: Did any of the faculty at Yale impress you?

DR. WETHERS: While I was there Dr. Grover Powers was on his way out as chair of pediatrics and about to retire, so I never had much contact with him. Dr. Thomas Forbes was an inspiring teacher. Dr. Charles Bunting was my thesis adviser – Yale required a thesis for graduation.

DR. DANCIS: Did you get to know any of them well ?

DR. WETHERS: No, not really. I could tell how impressive Grover Powers was, and that Department of Pediatrics was outstanding at that time.

I found the social milieu in New Haven cordial, but it was probably much easier then. I was only the third black woman to be admitted to Yale Medical School. When you have small numbers, and especially in the northern milieu, it tends to be easier. It's gotten harder as time goes on than it once was.

The first black woman to graduate from Yale Medical School was Beatrix Ann McCleary. She was from the New York area and a graduate of Vassar. She also went into pediatrics. The second one, Yvette (Fay) Francis, became a very close friend of mine, and she was 2 years ahead of me. She was a graduate of Hunter College. She was one of the people who sparked my

interest in sickle cell disease. She was a very unusual woman and still is. Evidently the Yale admissions committee must have had some relatively advanced ideas as you can tell from all of this. They had a few black males. After one had a nervous breakdown and committed suicide they waited for a while before they accepted any more.

The wife of my father's classmate and friend, Dr. Carter L. Marshall, who I mentioned earlier, had my brother-in-law join him in practice in New Haven. She was a very hospitable woman. They had a house in the outskirts of New Haven and she was a house mother to all of the black students at Yale, a few in the medical school, but mostly in the College and graduate schools and law school. In fact, I was engaged to a law student for a while. She would invite us out to dinner and was always available if I needed to talk to somebody. So, I had support and enjoyed my years at Yale.

DR. DANCIS: Tell me about after medical school.

DR. WETHERS: In 1948, I met my husband-to-be, Garval Booker, who was a New York person. He grew up in an apartment at 409 Edgecombe Avenue, which was a well-known apartment house in New York. There were several apartment houses known because Harlem Renaissance authors and other people of note lived in them. Thurgood Marshall lived there for many years. I had a close friend who also lived in 409 Edgecombe Avenue, who introduced us and we started dating.

We became engaged in 1950, a couple of years before I graduated from medical school. He had been in the Army and when he got out he had to look around and decide where he wanted to go to college. I think he was at Columbia University for a year before he went into the Army. He looked around and somehow or another he ended up at Sarah Lawrence College. I asked him how he happened to go there because I thought it was a woman's college, but for about 3 years after the war they had male students at Sarah Lawrence. One of his friends had heard about it and they went up to Bronxville. He decided he liked the campus, and he liked the tuition so he ended up going to Sarah Lawrence.

He finished a few years later and then went down to Howard College of Dentistry to dental school. We were supposed to get married, but didn't until I was at Bellevue Hospital in 1953. By the time I had finished medical school, he was in dental school at Howard, so I took an internship in Washington so I could be near him. It was the very first year of the internship matching plan in 1952 when I finished.

Of course, I knew Washington because it had been my mother's home, and we used to visit her sisters and my grandparents who were still living there. It was a very interesting experience because Washington was a segregated

town all the time my mother grew up there. When we would visit back and forth, we would drive down to Washington. We would have to eat before we left and take sandwiches until we got into the city. We couldn't go to the bathroom until we got to Washington because there was no place that you could stop. I learned about Jim Crow.

DR. DANCIS: Where did you serve your internship?

DR. WETHERS: I had a rotating internship at the Gallinger Municipal Hospital, that was renamed the District of Columbia General Hospital in 1953. It closed in 2001. D.C. General had strictly what they used to call a rotating internship. Now it is called flexible internship, so I got a taste of everything including riding the ambulance, which was a lot of fun.

Dr. Roland B. Scott, who was head of pediatrics when I was there, became one of my role models as far as sickle cell was concerned. He wrote a great number of clinical papers on sickle cell disease and made a name for himself in that area. He was one of the people who got me interested in sickle cell disease. He became the first African American member of the American Pediatric Society in 1953.

There were 3 medical schools that were involved at D.C. General: Georgetown University School of Medicine; George Washington University School of Medicine and Health Sciences and Howard University College of Medicine. Howard covered pediatrics and the other 2 had the other specialties. Since it was a city hospital, it was very competitive as far as attracting house staff. We had house staff, mainly from the south, but from other areas too. There were 1 or 2 persons from New York besides me, who were both Howard graduates. It was a very open place. The wards were all integrated, the house staff was integrated, and we all got along fine. It was an interesting and educational year for me. I learned a lot, but in those days there was only so much you could learn by treating hypertension with phenobarbital, and the only thing you had for the heart was digoxin.

DR. DANCIS: You finished only one year in Washington ?

DR. WETHERS: I wanted to stay until my fiancé finished his last year of dental school. I had decided to go into pediatrics and I wanted to get a residency at the D.C. Children's Hospital. It was a premier place at that time for pediatric training, even though it was in an old building that looked like a Victorian hospital. I can still remember going there to be interviewed and seeing nurses in long dresses with white hats going up and down the circular stairs looking like they were out of Florence Nightingale's day. Dr. Scott told me, "I will see what I can do to encourage them to accept you." He knew the Washington medical community well and he did, but they told him, "Frankly we are not ready to take an African American resident." They

would not consider me.

So, then I had to decide whether I wanted to stay in Washington or come home. I knew we would go back to New York. My husband-to-be was a dyed-in-the-wool New Yorker. He would never live anywhere else, so he knew when he finished dental school, he would be going back home. So, I decided I'd better see what I could do about coming back to New York so I could get a good foundation and make contacts. So that's how I ended up in Bellevue Hospital.

I applied to Bellevue as a pediatric resident, which turned out to be a wonderful year. I thoroughly enjoyed it. I mean, not only the people who were on the house staff with me, but all of the faculty. Dr. Saul Krugman was there at the time.

DR. DANCIS: Saul Krugman came from Passaic. Albert Sabin was from Paterson.

DR. WETHERS: Drs. Ruth Morris Bakwin and Harry Bakwin who were such loves. They would invite us to their home. And there was Dr. Edith Lincoln and Dr. Edward Sewell who worked with her. And of course, Dr. Stanley James, who was chief of pediatrics. So it was a wonderful year but they had a pyramidal resident system, and I wasn't accepted for the next year. When Dr. Richard Day was recruiting pediatric residents for the Kings County Hospital Center, he recruited Dr. Kenneth Gould and me to go with him to Kings County. I finished my second year of pediatric residency there, and then spent a year as chief resident. The outstanding people for me at Kings County were Dick, and then Dr. Janet Watson who was another sickle cell role model for me. She was a wonderful person. I wrote my first paper with her and a colleague named Dr. Gus Gavis on sickle-thalassemia. [G.S. Shields, D. Wethers, G. Gavis, R.J. Watson "Hemoglobin-S-thalassemia disease: report of a case in a Negro child." *AMA J Dis Child*. 1956 May ;91 (5):485-9]

DR. DANCIS: Janet Watson was a hematologist. What were her interest major interests ?

DR. WETHERS: Sickle cell, and the spleen, and pediatrics, too.

DR. DANCIS: How did you meet Dick Day?

DR. WETHERS: I don't remember exactly now, but I guess it was through faculty at Bellevue. He was such a wonderful guy.

DR. DANCIS: Why did you decide to concentrate on sickle cell anemia?

DR. WETHERS: It combined everything I liked. I never had sub-specialty training, but if I had, it would've been either in hematology or infectious disease. Sickle cell combined hematology with genetics, which I loved from my Queens College days. Many of the deaths in children with sickle cell disease were infection-related, so there was my ID [infectious disease]. In addition, mostly black kids who were involved. It couldn't have been a more interesting disease as far as I was concerned.

Dr. Fay Francis, the second black woman graduate from Yale Medical School 2 years before me, was at Bellevue for the year I was there. She got me involved in some other areas involving sickle cell disease. She started a sickle cell organization that I joined. It was trying to help all aspects of the disease, not only the medical care but also quality of life and policy issues.

I got married while I was at Bellevue and we had a weekend marriage until my husband finished dental school and came back to New York. My husband took a dental internship at Sydenham Hospital, and then opened an office in my father's office building. We had 3 sons, 2 of whom live in Manhattan, and my oldest son has twins, a boy and a girl.

DR. DANCIS: What did you do during your pregnancy when you were a chief resident and subsequent pregnancies?

DR. WETHERS: I worked up until the last minute. I had C-sections, and then I went back after 6 weeks. When I entered practice, I could not have done it without my extended family. We lived with my mother until the oldest child was born, a little after that. Then we got an apartment of our own. By that time, she was teaching school, so she was free in the afternoon and the summers, which was the main thing. She was a very vigorous woman. In fact, she and I bought a house in Danbury, Connecticut because my sister was living in New Haven. She still does with her 6 children. So, my mother would be there the whole summer. As a schoolteacher, she was off and would have various of the 9 grandchildren over the summer for a couple of weeks, which was wonderful. And during the wintertime, she was available if I needed her. I also had my husband's family, his mother and his aunt living in Washington Heights, so we could not have asked for better help. My aunt-in-law worked at the post office, so she was free in the mornings. If the kids got sick at the last minute I would call up and she would say, "Sure, bring them over." My mother-in-law was home in the evenings, so if necessary she would keep them. But without that extended family, it would have been absolutely impossible.

DR. DANCIS: When did you go into hematology?

DR. WETHERS: I didn't. Everything I learned was through my clinical experience. I didn't take any subspecialty training. In those days, there were

some hematology fellowships, but not that that many. It was much easier to find a clinical area that you liked and concentrate on it. I tell people I'm not a hematologist, although I know a bit about sickle cell.

DR. DANCIS: So, you went into practice? Where?

DR. WETHERS: I did general pediatrics from 1956 until 1966 and opened my practice in my father's office. It was right there for me. I was doing pediatrics, and he was doing general medicine. But he died about 4 years later, so I only did that with him for 4 years. I began my practice in the fall of 1956.

DR. DANCIS: You practiced in a poor community?

DR. WETHERS: Yes, but of course I had patients in all economic groups. I had the poor, and I had the middle class. I took care of the kids of some of my colleagues with whom I had done house staff training. So it was a whole big spectrum. I also had black and white patients because my office was in sort of a fringe neighborhood. But a lot of them were poor and were not able to afford good care. Between the emotional stress of not being able to get what I wanted my patients to have, and the rigors of trying to practice and raise a family it was tough

DR. DANCIS: What did you charge for an office visit?

DR. WETHERS: Oh, I think something like \$7. A house call might have been twice that. Most of my practice was in my office, but I made home visits at night and on the weekend after the office was closed and worried about my kids. I remember walking up a lot of stairs. But I had a support system. If I hadn't had a support system, I could not have done it.

My husband usually had evening office hours, so he was of limited help. But my mother was still living, and as a matter of fact, we lived with her for a while until our second child was born, when we got our own apartment. My mother, by that time, had gone back to teaching school. Because of the baby boomers, you may remember, they needed teachers badly. Although she had not taught for 30 years, she took her certification exam and passed it, and then taught as a substitute in the New York school system. She taught until she was ready to retire in 1965. So she had teacher's hours, and she would help out in the evening. My husband's family was very helpful. My mother-in-law was a wonderful person. She and her sister would both pitch in. Without them I definitely could not have done it.

My husband died in 1996. But all 3 of the boys are here. Two of my sons live in Manhattan. One is down in the East Village. He is a musician. The younger one is on the west side. He is a lawyer. Nobody went into medicine.

They are wonderful boys. They're very supportive. I'm glad I have them. I have 2 grandchildren, twins, a boy and a girl. They are my oldest son's children. He and his wife are separated, but the kids live in Yonkers, and we see them now and then.

DR. DANCIS: What were your patient's illnesses when you were in practice?

DR. WETHERS: The usual things such as otitis media, but not much mastoiditis, diarrhea, respiratory infections and meningitis. We had polio until vaccines came along. Lead poisoning was just hitting the horizon, and I saw a lot of it both at Bellevue and at County.

DR. DANCIS: Where did you hospitalize your children?

DR. WETHERS: At Sydenham Hospital. That was one of the places that had an open staff because many New York hospitals were biased. A lot of the black physicians were on the Harlem Hospital staff, which was a city hospital, but they couldn't admit their patients. But at Sydenham Hospital, a small community hospital, they could.

I became director, of pediatrics at 3 hospitals, Knickerbocker [Hospital], Sydenham and St. Luke's-Roosevelt Hospitals and did a balancing act between practice, administration, teaching and raising my family.

I covered in my father's HIP group when I finished residency and I started practicing in his office as a pediatrician. In order to augment my salary, I covered in his group for a few years. They didn't have an opening at that time for a pediatrician, but when someone was on vacation, I would cover for him. Private practice was not only very difficult, especially since I had a growing family. It was also hard for my patients. I got very unhappy about not being able to do what I wanted for my patients because they couldn't afford medicines. At HIP all I had to do was write a prescription and it was covered. I could get them hospitalized. I could get them specialty care. I could get the x-rays at the group office. So the contact I had with HIP was very good. It was after that I decided to leave private practice totally and go into a HIP group.

The group I went to was at 185th and Broadway, and I've been in that area since. They needed a pediatrician, so they hired me as a contract physician, which meant I was just covering. After a few years they had a vacancy, so I became a full partner at that time. I didn't need to work full time at first. You could work part time and still be a partner. I was then in a hospital doing administration and teaching at St. Luke's. The idea of HIP was good, but it has changed since, some things for the better, for some others not so good. The idea of being able to give your patient basic care in one building

where you have a laboratory, a pharmacy, radiology and access to basic specialists and general surgeons was very good for the people that did not have a large income. The very lower income group couldn't afford HIP but when Medicaid came along they were offered coverage. I think it was very good for them.

DR. DANCIS: So, the attraction for the HIP was that you thought you could do a better job?

DR. WETHERS: Yes, partly that, and partly coverage. In the early days, I was doing house calls, but I didn't have to do them every day. When I became a partner, they had stopped having specialists — and pediatricians were specialists — do house calls, so I didn't have to do house calls. I would have to take a rotation for answering consultations. If a patient went to the emergency backup center, the physician there would call the pediatrician on call if they had a question, and you answered it on the phone.

DR. DANCIS: During all this time you maintained your interest in sickle cell anemia?

DR. WETHERS: Yes, that was increasing. I worked in sickle cell clinics at Sydenham Hospital and started sickle cell clinics at Arthur C. Logan Memorial Hospital, which was Knickerbocker Hospital until 1974 and at St. Luke's-Roosevelt Hospital. As you probably know, even now one of the things the sickle community and many sickle patients have been unhappy with is that generalist physicians don't ask for help as often as they should. Many of them haven't been exposed enough to learn about it. A lot of children with sickle cell anemia are taken care of by general pediatricians. This usually works out all right because I think pediatricians have a pattern of asking for consultation a little more than the average internists who feel they can go beyond what they should. Because things can get so bad so fast in sickle cell disease, they don't call appropriately for help until it's too late. The everyday care of the sickle cell patient can be done very nicely by an internist provided he knows enough to be aware he needs help. A sickle cell clinic can help coordinate care.

DR. DANCIS: Was your involvement in sickle cell disease as a general pediatrician?

DR. WETHERS: Yes, initially, but I got involved more specialized when I was director of pediatrics at St. Luke's. That's when I bit the bullet and I got into academic aspects and learned how to do clinical research. I met National Institutes of Health folks which opened up other facets. The NHLBI [US National Heart, Lung, and Blood Institute] put out an RFA [Request for Application] for the Cooperative Study of Sickle Cell Disease. The high mortality of sickle cell disease had just hit the headlines because of

reports by Dr. Roland Scott and an adult hematologist named Dr. Robert B. Scott at the University of Virginia. Fifty percent of children with sickle cell disease died before they were 20 years old. President Richard M. Nixon was instrumental in passing the National Sickle Cell Anemia Control Act and they started setting up clinics to screen and to counsel patients. But the people at NHLBI decided they did not know enough about the natural history of sickle cell disease in the United States. The genetics of it was known. The homozygous and double heterozygous forms, Hb-SC and HbS-beta thalassemia were known, but we didn't know the clinical distribution among these. It was decided to design a study to follow children from birth, before they had any symptoms, to avoid the bias of only enrolling children who were sick. They wanted to find hospitals that had clinics, that had enough patients, that could diagnose patients at birth and could follow them long term once they were diagnosed. The clinic had to have the ability to do newborn screening and the ability to show a track record of keeping children in care.

Having set up 3 clinics, I could show I could do these things. There was a nice nucleus of patients at St. Luke's. The city Department of Health lab had done newborn screening since 1975, so we knew we could make diagnoses in the newborn. It was fortuitous that after starting newborn screening for PKU [phenylketonuria] and other genetic diseases, the lab started looking around for other conditions they could add. They decided maybe sickle cell would be good because they could do it by electrophoresis, which wasn't terribly expensive. There were discussions about whether it would really help to find these kids at birth because you couldn't do anything for them, or so we thought at the time. But both Drs. Audrey Brown at Downstate and Sergio Piomelli at Columbia, told me that they put their kids on penicillin to prevent pneumococcal sepsis and meningitis. I hadn't started doing that and later evaluating it became an offshoot of the Cooperative Study.

When the RFA come out, I applied. I told myself, "Well I will muster up my courage and resign from the pediatric directorship at St. Luke's, and see if I can go for broke and get a contract. I can do this Cooperative Study because I have both the patients and the interest." When a grant was awarded to me, I began working on it.

DR. DANCIS: You gave it full-time?

DR. WETHERS: Well almost. I was still doing some general pediatrics and by that time, I had started with HIP. My father was one of the initial starters of the HIP group in Harlem, and so I held onto that for a while. I needed to be sure I had some money for our kids who were then starting private schools. But most of my time was as clinical investigator. I was on the clinical faculty at Columbia P&S [Columbia University College of Physicians & Surgeons], because that came with the St. Luke's appointment.

As an offshoot of the Cooperative Study, NHLBI started a randomized study of penicillin in children, which proved it was effective in reducing pneumococcal infections and mortality. Newborn screening spread after they found out there was something they could do for sickle children, which was put them all on penicillin. The study showed a marked drop in deaths from sickle cell. Now 85 percent of the kids survive into their 20s, instead of 50 percent dying before the age of 5.

That's when the real push came for newborn screening all over the country. New York State was in the vanguard because we'd already started. Dr. Howard A. Pearson had already started screening cord bloods in New Haven, but that was only in one hospital. The state of Connecticut didn't start until later on, but Yale-New Haven Hospital had started in 1969.

One of the big names now in sickle cell is a pediatrician named Dr. Kwaku Ohene-Frempong. He is a hematologist, and he runs the sickle cell program at The Children's Hospital of Philadelphia. He is from Ghana. He was an athlete and participated in the Olympics in Mexico many years ago. They were screening the Olympians and he found that he had sickle cell trait. He stayed in the United States for Yale College and then went to Yale Medical School. He married a New York girl. In fact, he married a girl who was raised the same apartment building that my husband was at 409 Edgecombe Avenue. When he married her, he did not know she was a sickle trait carrier. They had their first child while he was in medical school, and he was diagnosed with sickle cell disease by Dr. Howard Pearson in his cord blood screening program. Of course, this almost destined that Kwak — we call him Kwak — was going to go into pediatric hematology. He has done marvelous work since then and runs the program at CHOP.

DR. DANCIS: How is his son ?

DR. WETHERS: His son is doing pretty well. He has had problems, but he is surviving. After that came prenatal diagnosis by amniocentesis. A lot of that work was also done at Yale. So Kwak didn't have another child until Janet his wife could have prenatal diagnosis, and they now have an unaffected girl.

DR. DANCIS: Do you advocate community drive to identify the trait?

DR. WETHERS: I think all potential parents should be tested. This has been an ongoing discussion, and it is still done very erratically. A lot of the parents don't find out until their first child is born who has the trait or the disease. That's another problem we keep working on. There is a very active sickle cell community in this state that involves pediatric hematologists, geneticists, genetic counselors, and patients. It's a nice ecumenical group.

One of the things we're trying to do is to push individual testing statewide. I think it should be individual because there are problems with community drives. Early on there were screenings on the street using solubility tests, which really should not be used for screening. It should be electrophoresis, which is hard to do on the spot, so it means having follow-up. And you have to make sure education is done. I think that young families should have their primary care physician do the screening. So ours is a push to get primary care physicians make sure their patients are screened appropriately. One of the things I was able to do was to make sure all the obstetricians in the Manhattan HIP ordered electrophoresis screening on their prenatal patients, and it was done. And since that was hooked up with a genetics program, it was covered under HIP. Most patients were diagnosed and were screened, and then there was counseling done. This led to quite a bit of prenatal diagnosis if the patients wanted it. The screening and the counseling has to be done sensitively. It has to be directed counseling.

It's been interesting to review the politics involved and the turn off of the community from the standpoint of trying to screen everybody. They'll say, "Oh yes, let's screen." But then they have the fear that if they are found to have even the trait, they are going to be discriminated against more than they are anyway by insurers or employers; even though the trait is not disease. Then they figure this is some overt or covert genocide. All of which I could see very nicely as another burden to put on the black community.

DR. DANCIS: Has that attitude changed?

DR. WETHERS: Somewhat, but there is still a lot of distrust, and I can see why, considering all of the bad vibes to come out of things like the Tuskegee experiment [Tuskegee Study of Untreated Syphilis in the Negro Male], and the aftermath of the early screening programs. One of the things we succeeded in at St. Luke's over the years was to be very circumspect as far as counseling is concerned, and to make sure the patient is well-educated about the disease and their options. It really has nothing to do even with how much schooling they have finished, but we must make sure they are taught carefully so they can make their own decisions. Decisions are often not easily made, but it has to be theirs. One of the things we do at St. Luke's is that if they are a family at risk for having a child with sickle cell disease, and if they are having trouble making up their mind, whether to have prenatal diagnosis, we suggest they come and visit our clinic because we have patients of all ages there. They can see a spectrum of the disease, have a chance to talk to mothers and make their own decision. It's not anywhere near a complete death sentence, but on the other hand it's not easy to raise a child when you don't know from moment to moment how ill they may become.

So I got into research, through the RFA. The Cooperative Study continued from 1978 until 1998, because we wanted to follow this precious newborn

group for the first 20 years of their life.

DR. DANCIS: But wasn't the natural history changed by your intervention?

DR. WETHERS: The main thing that changed was death from infections. There are still many different problems of sickle cell, and by no means have all of them been solved. Two of the ongoing problems are stroke and the acute chest syndrome [ACS]. One of the major treatments is blood transfusion, which has its own big problems. There are many answers that have to come from further ongoing studies by good people. Downstate Brooklyn has always had the largest number of births of sickle children in New York State because of the size of their obstetrics service, plus being in the Borough of Brooklyn, which has a very big number of at-risk patients. There is a very good pediatric hematologist there named Dr. Scott T. Miller, who is doing a great deal of good work.

One important area of research involves looking further into the genetics and trying to match up haplotypes with symptoms or a spectrum of disease severity. That's been very difficult to do. It's easier in Africa because there is not as great a mixture of haplotypes. In the United States there are people whose ancestors came from all over Africa so the haplotype relationship is not clear. Even in an individual family there may be a spectrum of severity probably because there are other genes that interact. There is some genetic basis for stroke, and if you have genes which predispose you to a stroke, they may predispose you more for a stroke if you also have sickle cell disease.

DR. DANCIS: How can you provide antepartum counseling if the disease is so clinically variable?

DR. WETHERS: That's why you can't, and it has to be up to the individual to make the decision about reproduction and pre-natal diagnosis. But you have to let them know the degree of severity is wide, and that even if you have one child with sickle cell disease who is relatively well, another child with sickle cell may be severely affected despite having the same genes.

DR. DANCIS: Let's try and give this a historical context, and you are in a wonderful position to do that. Your interest in sickle cell anemia began when you were a resident. At that time, what was the approach to diagnosis and treatment?

DR. WETHERS: When I was on the house staff in the early 1980s, we could make good diagnoses because electrophoresis was available. Our push was to test any child from a high-risk group, namely African American, Greek, or Italian. If they were found to have sickle cell disease, the parents were educated about the illness. Then they were instructed that at the first signs of fever, pain, or swelling or pallor to get medical help immediately.

Then most of the deaths were from overwhelming pneumococcal infections. The next biggest infectious cause was Haemophilus influenzae type B. In those early days, we didn't have H. flu vaccines, so we used broader spectrum antibiotics. Going back to my house staff time, I don't remember treating acute chest syndrome. Perhaps patients died before I saw them. For acute splenic sequestration crises, manifested by more severe anemia and exaggerated splenomegaly, we would give blood transfusions and recommend splenectomy later, the same as we do now. I didn't see many children with strokes as a house officer, probably because so many children died of infections before they got to the age at which strokes usually occur. The biggest problem then was pain of course, and it still is today.

DR. DANCIS: Talk a little more about how genetics might influence the clinical disease.

DR. WETHERS: The homozygous state (Hb SS) is the most severe and the most common. There are some other double heterozygotes, like Hb SO-Arab that seem to be severe, but there are so few of them it's hard to know for sure. When we first went into the Cooperative Study, we hoped there would be enough patients born with the rarer forms, but there weren't. We can barely make inferences as far as Hb-SC disease is concerned, and that's the second most common sickle disease. The same is true for Hb S- beta thalassemia.

DR. DANCIS: What is the life expectancy of patients with Hb-SS disease?

DR. WETHERS: It's certainly increased today compared to 30 years ago. But the lifespan increase has been largely due to much better survival in the pediatric age group. In adults, death rates start climbing in the 40s and most of them die sometime between 45 and 60 years of age. There are a few Hb-SS patients in their 50s and 60s, but they're unusual. Later deaths are usually due to chronic organ failure; kidney, liver and pulmonary disease.

DR. DANCIS: You've been involved very much at the administrative level, locally and nationally. Can you tell us some about that? Is there some organized attempt to educate the community?

DR. WETHERS: Yes, we try to do it on many fronts. We go to schools, and the clinics themselves reach out to their hospital communities.

DR. DANCIS: You make it sound as though it's sort of accidental whether somebody is well informed or not informed.

DR. WETHERS: In a sense it is. I mean, unless you have a hospital that is reaching out, it is accidental. This is a problem that has been discussed on the national level, as well as the local level. We had a national conference of

the newborn screening community on what to do about the traits that are picked up in newborn screening, and we made some suggestions. These were published in conjunction with guidelines about the disease in general, which is fine. But I wanted to see it republished in *Pediatrics* for the general pediatrician. It wasn't accepted and the reviewers said, "The private physician is usually informed by the state lab when their patient has been born with the sickle cell disease, but often not with the trait." Often the lab has no idea who the primary care provider is. We need to make a much more concerted effort to make sure this information is retained. Of course, a young child doesn't need to know, but they need to know when they become adolescents and adults. So we need to find some way of hooking up with newborn information later. You would hope that parents would do this. We do have parents who will remember being told, but we have many others who don't. It depends on their level of awareness. If they're taught well enough in the infancy period, they're probably going to remember later. At that point you have to plant a seed, and unfortunately I'm sure it's done very haphazardly.

DR. DANCIS: Are you finding the cooperation you need at the local level and the national level?

DR. WETHERS: It's like preaching to the choir because people who are aware and know are those who have been involved in it, rather than the medical world at-large, like so many public health issues. I know sickle cell pales before diabetes, obesity and hypertension even in my community. God knows we're going backward instead of forward when it comes to diabetes and obesity.

DR. DANCIS: Dr. Wethers, when I told a hematologist that I was going to interview you, he said, "Dr. Wethers? She is the Grand Dame of sickle cell anemia."

DR. WETHERS: When you live long enough and are still active, I guess you become a Grand Dame.

DR. DANCIS: Tell me again about the people who influenced you to become involved in sickle cell disease.

DR. WETHERS: Well, I think I mentioned that the initial person who got me interested was Dr. Roland Scott during my internship in Washington. Then Fay Francis, who was the second African American woman at Yale Medical School. I interacted with her at Bellevue during my year there. She had been very interested in sickle cell and was trying to help all aspects, not only medical care, but also quality of life issues and policy issues. Next was my interactions with Janet Watson at County. Because of my interest, I started a sickle cell clinics at the Knickerbocker Hospital. It was inadvertent

that I got involved in Sydenham Hospital. I met a black pediatrician from Nigeria named Dr. Carl Reindorf, who had started a sickle cell clinic at Sydenham Hospital. He then decided to leave the area and went to Washington D.C. on a fairly sudden basis and asked me to take over. So here I was with 2 sickle cell clinics. It was soon after that I went to St. Luke's and gave up the 2 community hospitals. I started a sickle cell clinic at St. Luke's because of my past experience and interest. So my interest was at first strictly on a practical, clinical level as well as on policy when it was necessary, trying to work with patients to get what they needed. Then I got involved in clinical research and the Cooperative Study. NHLBI put out an RFA for a national study of sickle cell disease. They were looking for clinics that had a substantial number of patients and could keep them in care for a long period of time. That's when I decided I would try for a grant that because I had a track record. So I applied and got it. I had the clinical experience with sickle cell. and I had been involved in newborn screening. The state public health lab considered including screening for sickle cell because it was diagnosable by electrophoresis at birth which was relatively inexpensive so they should be able to test without too much expense. They called people in the city they knew had experience and talked to Dr. Sergio Piomelli at Bellevue, Dr. Audrey Brown at Kings County and me. They asked us what we thought about newborn screening, and we all said we thought it was a good idea. Even though you couldn't cure sickle cell disease, you could make a difference by educating parents about the possibility of infection and splenic sequestration. Both Audrey and Sergio also more said, "We put our children on prophylactic penicillin, and we think it helps." Although there was no proof, on the strength of the New York City experience the state decided to add screening for sickle cell, which they did in 1975. We were way in advance of any other state and did it quite successfully. I was asked to chair an NIH [US National Institutes of Health] Consensus Development Conference that recommended newborn screening of newborns for sickle cell. Now I think at least 43 states and the District of Columbia test their newborns for sickle cell.

DR. DANCIS: In your natural history studies, is there a standardized approach to treatment?

DR. WETHERS: Well, for some things, but there are still a lot of things that need to be done. Clinicians often act more from their own experience than from established protocols. Often we are asked, "What is the evidence?" and often there isn't any. So, there is a lot that still needs to be proven. There are some things that have been rigorously proven. For instance, there are established and accepted protocols for the use of hydroxyurea in adults. Right now we are doing a baby hydroxyurea study to see if and when we should start it and to define any long-term effects. Obviously, in pediatrics it's not just what happens in the short term, but we have to find out how taking a drug which has suppressive effect on the bone

marrow may impact on the child's entire life. But if you ask me, “Is there a protocol for every complication?” the answer is no. There are certainly guidelines for prophylactic penicillin and immunizations for a child with sickle cell disease. The American Pain Society worked with the sickle community to make recommendations as far as medications for pain. Now, not all of these are followed by everybody because most of the peoples in the field, by and large, are hematologists. There’s still some leeway to use your own bent in taking care of patients based on your individual experience. This probably means that there are alternative ways of doing things. I do think there needs to be more study, not only of what could cure the disease, which is obvious, but also what we are doing, and what we are doing incorrectly.

DR. DANCIS: Looking back at this long career which you have had, what has happened that gives you the greatest satisfaction?

DR. WETHERS: Definitely to see a few things which have helped. I mean, to see children who have survived. I have ingrained in my mind certain disasters such as a feisty woman with sickle cell anemia, whose son also had it. She brought him into the emergency room moribund. She’d been told to bring him in immediately if he had a fever. She came in only 10 or 15 minutes after he developed fever, but he already had overwhelming sepsis and expired. We haven’t had a sepsis at St. Luke’s in I don’t know how long. That advance was possible because of prophylactic penicillin and with rigorous immunizations with the new conjugate pneumococcal vaccine. Treatment for stroke has its pros and cons but has certainly changed the outlook for children with stroke for the better. Even if pain is not controlled with hydroxyurea, being sensible about the way pain medication is given is important.

There has been a Sickle Cell Advisory Committee [SCAC] for the state of New York for years. We worked initially with the health department, and then when they set up the Genetic Network under the [US] Health Resources and Services Administration (HRSA), we became part of GENES, which was the Genetic Network of New York State, Puerto Rico and the Virgin Islands that was funded. Now it is no more. They did away with the Genetic Network. The Sickle Cell Advisory Committee is composed of many different disciplines. I mean, you can’t limit it to hematology because there is such a genetic component, and such an ID component, and as the patient gets older chronic organ failure. You may need a pulmonologist, a neurologist, a cardiologist — all the medical specialties. Social service is very important. You can’t have a good comprehensive program without having good social service including psychology, psychiatry and, genetic counseling.

Nurses are also important. I had a wonderful nurse practitioner involved when I first set up the program at St. Luke’s. She herself had Hb- SC

disease. She was trained in Jamaica, and nurses from Jamaica have had rigorous British training which is even more rigid and organized than many of our schools of nursing. We got her at the beginning of the Cooperative Study. She was always right on target. The kids loved her and she was the most empathetic person in the world. Unfortunately she subsequently had some severe health problems and almost died with acute chest syndrome. She's now retired and living in Maryland. But it was people like her who were involved in the Sickle Cell Advisory Committee that made it possible to give total care to the patient. It has to be a team approach, a team that includes the patients, their families and friends. It really has to be a group effort.

DR. DANCIS: What do you think should be done in the future?

DR. WETHERS: I think there are several things that could make a big difference. One is to discover a really good and non-toxic anti-sickling agent, or at least an agent with minimal side effects. Hydroxyurea has some anti-sickling activity, but something better is necessary. Another thing is to develop a real cure. By that I mean, bone marrow or stem cell transplant. We know sickle cell disease can be cured by transplant from an HLA [human leukocyte antigen] compatible donor, but to get bone marrow that's compatible is not easy for a number of reasons. Finally, stem cell transplants. We have had 1 or 2 families at St. Luke's who have had more children in order to get their umbilical blood to provide stem cells for an affected child. Again, that doesn't always work because they may not be HLA-compatible. We've had parents who have saved cord blood from normal children in case they have a subsequent affected child. Down the line genetic engineering may be developed, but that's going to be a while in the future. Every 5 years I hear geneticists say "Ten more years," so it's going to be a while before they do that.

Prenatal diagnosis has been helpful if the parent agrees to it, and if they know in advance they're at risk. Again, so much of the problem is families who are not aware they have sickle cell, or that they are carriers of sickle traits or other hemoglobinopathy traits. A lot of that again is because there are groups that are not able to get the care they need, not only in people from low economic levels, but also in the Hispanic population. A lot of Dominicans are at risk, and their education level about sickle cell disease is much lower than it is in the indigenous African American population. There has to be counseling, so if a family wants to take advantage of prenatal diagnosis or pre-implantation diagnosis, they can do it. I think that needs to be, and I think ultimately it will happen. I want every family who could be at risk tested, and every family who is at risk provided with adequate counseling. Whatever decision they make is entirely up to them. If they want prenatal diagnosis, they should be able to have it, even at such basic levels.

DR. DANCIS: We have a constant influx into this city of people with sickle cell trait.

DR. WETHERS: There are a lot more Africans as well as Haitians and Dominicans coming in. That's an even bigger problem because we have a fair number of individuals who speak African dialects or Spanish or French now. You have to find interpreters who speak Spanish, French or native African languages. So there's a language and a cultural barrier. That has to be looked at.

DR. DANCIS: I noticed in your CV "The Hole in the Wall Gang Camp."

DR. WETHERS: Another time when we were talking about mentors you mentioned Howard Pearson, and I think I said, "Well, definitely Howard Pearson was a mentor, but he came later." He came to Yale long after I left. Of course, I had known over the years about his interest and his pioneer work in doing cord blood screening at Yale-New Haven Hospital, but it was limited in Connecticut to just that one hospital. He was using cord blood, which is certainly doable, but it's harder to handle than using the dried blood spots on filter paper. But I knew about his work, and what he had found, and how he had pushed having newborn screening done. He was involved in the Cooperative Study. His sickle program at Yale-New Haven was one of the 23 hospitals that were involved in the Study. We were both part of the pediatric group, so I got to know him on an individual level for many years, as a matter of fact.

He was the reason I got involved in the Hole in the Wall Gang Camp. Paul Newman was interested in leukemia and other children's cancers and he wanted to start a camp in Connecticut for children with these diseases. Newman named the Camp after the gang of outlaws in his movie with Robert Redford, *Butch Cassidy and the Sundance Kid*. He contacted Howard Pearson because he knew that he lived in Connecticut and asked him to be medical director and work with him in planning and building a camp in northeastern Connecticut. In his wisdom, Howard asked Newman, "Why don't you expand who it will serve to include children with serious hematologic problem and not limit it just to malignancies." Newman did, and sickle cell disease, hemophilia and thalassemia and subsequently HIV were added. In 1990, Howard called me and said, "I'd like to suggest that we have a special session for New York children with sickle cell disease next summer. I know you have many more children than we do in Connecticut." I introduced this possibility to the New York Sickle Cell Advisory Committee and they approved. Every summer since then we have been getting together a New York cadre of about 100 children to go to The Hole in the Wall Gang Camp for a week. Paul Newman started other camps including one in New York at Lake Luzerne, so patients from St. Luke's have gone up there over the years too. The basic medical and nursing staff at the Hole in the Wall

Gang Camp are still from New Haven, of course, but they welcome volunteers from all over. My adult hematologist and the pediatric hematologist go up for the sickle cell session of the Camp. I have never volunteered, but I have visited the Camp, which was a wonderful sight.

They really have done wonders for the kids because it lets them be around other children to share problems. But they also can have a fun time and be as normal as can be under the circumstances. They have things that are geared to the sickle cell patient. For instance, they heat the swimming pool because cold will precipitate pain crises. When they come out of the pool they have a closed gazebo with infrared heat lamps so the kids can keep warm. There's an infirmary where they can stay if they need treatment, and there are ties with other hospitals if they have to be sent home. The New York programs underwrite the cost of the bus that takes them up. Newman, of course, has plenty of money because of the sale of things like Newman's Own salad dressing. One of his major charities is the Hole in the Wall Gang Camp. He said, "We will pay for transportation." But I felt very strongly, and the committee did, too, that the parents and the programs should feel they have some stake in it. So we ask the program and the parents to give whatever they can, and if they can't give any, well, then they don't. But if they can give a little bit, then they will. So, we pay for the bus to transport them up and back. The aim of the camp is to give the kids a week of outdoor camp activity.

DR. DANCIS: Is there anything educational?

DR. WETHERS: Well, they get some, but it's incidental. They get it through the counselors and volunteers and by interaction with other kids. There's no set curriculum. And the kids really enjoy camps, they love it. It's been very helpful because when you have a handicapped child of any kind you tend to either overprotect them or neglect them, even though you may not know you're doing it. So they need a more normal exposure. It gives that to them as much as we can, as well as letting them link with other children who have similar problems.

DR. DANCIS: Dr. Wethers, tell me about your activities with the American Academy of Pediatrics?

DR. WETHERS: I became a member of the Academy shortly after I passed my pediatric boards and attended the AAP annual meetings quite regularly, especially after my duties became a little lighter but less so since I've been retired. I got involved in some of the AAP committees and also locally in New York Chapter 3, District II. In the 1960s, I was alternate chapter chairperson and then treasurer for a while. I have been a speaker at AAP local programs.

On the national scene, I was on the Committee on Careers and Opportunities [COCO] which worked to increase involvement in the community by the Academy. One of the reasons why I got involved in COCO concerned women and increasing their input in the Academy. I feel this will be self-solving because as the number of women in pediatrics increases, then the membership of women in the Academy will increase, and as that increases there will be more women in leadership positions. I think that this is also an issue in academia which is going slower, but again, it will change in time as pediatrics changes proportion-wise. Cultural diversity has been very slow in changing, and I don't know what's going to happen with that. I think there should be bigger cultural and ethnic diversity in the Academy. But it's difficult because there are so many stresses on the pediatrician, and he or she will often stay with their own ethnic based organizations because they provide a support group. Later I was on the annual meeting planning group, which was very interesting, although quite stressful.

I chaired the AAP committee on adoption and foster care for a while. One of the things I haven't mentioned, was that I was medical director of a foster care agency for a number of years. That got me involved in foster care and adoption, so I headed that committee for a while and enjoyed it. One of the things I noticed in the sickle program is how bad communication is. I've had children who were placed in foster care, who were diagnosed as sickle cell disease by newborn screening, but the foster care agency didn't have the foggiest of what that meant. On 1 or 2 occasions, the foster parents fortunately knew what it meant and said, "This kid needs special care." It was the foster parent advocating for the kid that allowed access to special care. So again, there are foster parents, and then there are *foster parents*.

DR. DANCIS: Tell me what you mean by cultural diversity.

DR. WETHERS: Well, by cultural diversity I meant not only from the standpoint of increasing the African American presence in the AAP, but also Hispanics. And Hispanics of all groups, because many people lump Hispanics together, as well as lumping Asians together even though there are so many distinct cultural groups.

DR. DANCIS: Doesn't that just self-correct by membership?

DR. WETHERS: Well, it will in time, but sometimes it's slow and I see it as a problem. If you have a group that does not have its own support or network, as well as no history of being suspicious of the world at large, it will be faster. Also, if its visibility is not as great as it is in the African American community, this can happen faster. The African American community has a long of history of prejudice. We've been that route, and we've been burned. We don't want to go that route longer, and our own groups can give us support. But minorities need to understand that as long as there is a

majority, they have to be involved with the majority in order to get things done. Initially when I was in school and after getting out of school, there were very few opportunities and very few African Americans were really integrated. When they increased their numbers in schools and in professions, African Americans tended again to isolate themselves because there was support and help in numbers. But it really needs to be both. It's all right for you to have your own support group, but you still have to reach out into the majority community. You know, "If you can't beat them, join them." You're not going to get anything done unless you can join, get your voice heard and make a difference to everyone. There has to be both things. You can have your own group, but you have to join the mainstream, too. So, I would like to see a faster inclusion in the Academy of all groups. Obviously, particularly the African American group, but all groups, so they can be heard.

DR. DANCIS: What is your advice to students contemplating entering medicine and those who are completing their medical training?

DR. WETHERS: Well, even though it's a far different world from the one I entered 50 years ago, far be it from me to discourage anybody. In fact, I would still encourage them. One of the things I love to do is to mentor. I have had mentees over the years in various settings. I try to help them with their general thinking, as well as helping them to finding advisors from whom they can get help from, depending on what their specific interests are. If I felt a person was not only capable, but was really committed, I would do everything possible to encourage them.

My oldest son is a musician and has always had talent, but he was dyslexic as a child. He had the strengths and weaknesses. His teachers would always say, "Well, he has musical talent." In those days, 40 years ago, the problem was finding somebody who knew what dyslexia was and what to do about it. We were fortunate and he was able to conquer it. My husband and I insisted that he go to college, but he would say, "Oh, all I do is like music." In December of his senior year in high school, we put our foot down and said, "You've got to apply. You've got to go to college." But then we sat down with him for a serious discussion. He told us, "You know, I know you and dad are disappointed in me because I'm not going into medicine and dentistry like you." I said, "Are you kidding? You've got a God-given talent. Why would I want you to do something else?" Of course, he went into music. He teaches, he composes, he performs. I don't see how anybody can play a piano, including me. So, only if my mentees wanted to go into medicine would I encourage them, and then I would do anything I could to help them and guide them.

For people finishing medical school I talk about a trend now to do general patient care instead of some of the esoterica of sub-specialties. These are

necessary, but do not need to be oversubscribed. If they want to go into family practice, I tell them, “Look, if you want to go into a family practice get double boarded in internal medicine and pediatrics. Don’t take a family practice residency.” I feel very strongly about that. I don’t feel there is enough pediatrics in most family practice residencies. They give only a small amount, 6 months or so, and say, “Well, you know the old maxim, ‘Small children, small problems, small emphasis.’” People I’ve talked to who have gotten double boarded have been glad they did. It takes a little longer, but it gives them dual competencies instead of just one. If you want to do pediatrics alone, it is fine if you like children. If you want to combine some general pediatrics with a sub-specialty, take extra training. These days you can do both. In many areas, depending on the size of the practice, you can do mostly general pediatrics and some subspecialty.

I’ve seen this over the years in the hospital setting, too. For instance, the swing now is to have pediatric emergency in general emergency medicine departments. But their trainees often don’t have enough pediatrics with their emergency medicine training. They may not know what they don’t know, so they don’t always call appropriately for help. I don’t think a pediatrician needs to see every baby, but the emergency medicine doctor needs to know when to ask for help. My push is to get more pediatrics in family practice and emergency medicine.

DR. DANCIS: Dr. Wethers, I thank you very much. I think we had a some very interesting discussion about many things.

DR. WETHERS: And I have enjoyed talking to you.

Index

A

American Academy of Pediatrics, 25, 26, 27
American Academy of Pediatrics, Committee on
Careers and Opportunities, 26
American Academy of Pediatrics, New York
Chapter 3, 25
American Pain Society, 22
American Pediatric Society, 9
Arthur C. Logan Memorial Hospital, 14

B

Bakwin, Harry, 10
Bakwin, Ruth Morris, 10
Bellevue Hospital, 8, 10, 11, 13, 20, 21
Booker, Garval, 8
Brown, Audrey, 15, 21
Bunting, Charles, 7

C

Clinton, New Jersey, 1
Columbia University College of Physicians &
Surgeons, 15
Cooperative Study of Sickle Cell Disease, 14, 15,
16, 17, 19, 21, 23, 24

D

D.C. Children's Hospital, 9
Day, Richard, 10

E

Edward Stitt Junior High School, 2

F

Feld, Frances, 7
Fisher, Rudolph, 5
Forbes, Thomas, 7
Francis, Yvette Fay, 7, 11, 20

G

Gallinger Municipal Hospital, 9
Gavis, Gus, 10
GENES
The Genetic Network of New York State,
Puerto Rico and the Virgin Islands, 22
George Washington High School [New York
City], 3

Gould, Kenneth, 10
Great Depression, 2

H

Health Insurance Plan of Greater New York, 6,
13, 14, 15, 17
Hole in the Wall Gang Camp, 24, 25
Holiday, Billie, 5
Howard University, 1, 4, 6, 8, 9
Huettner, Alfred Francis, 5

J

James, Stanley, 10
Jessie Smith Noyes Foundation, 6

K

Kings County Hospital Center, 10, 21
Knickerbocker Hospital, 13, 14, 20
Krugman, Saul, 10

L

Lancefield, Donald E., 5
Lancefield, Rebecca Craighill, 5
Lincoln, Edith, 10

M

Marshall, Carter L., 4, 8
Marshall, Thurgood, 8
McCleary, Beatrix Ann, 7
Miller, Scott T., 18

N

New Haven, Connecticut, 4, 7, 8, 11, 16, 25
New York City, New York, 2, 6
Newman, Paul, 24, 25
Nixon, Richard M., 15

O

Ohene-Frempong, Kwaku, 16

P

Passaic, New Jersey, 1, 2, 6, 10
Pearson, Howard A., 16, 24
Piomelli, Sergio, 15, 21
Powers, Grover, 7
PS 155 [elementary school in New York City], 2

Q

Queens College [CUNY], 3, 4, 5, 11

R

Redford, Robert, 24

Reindorf, Carl, 21

S

Sarah Lawrence College, 8

Scott, Robert B., 15

Scott, Roland B., 9, 15, 20

Sickle Cell Advisory Committee [New York State], 22, 23, 24

sickle cell anemia, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26

St. Luke's-Roosevelt Hospital, 13, 14, 15, 17, 21, 22, 23

Sugar Hill [New York City], 2

Sydenham Hospital, 6, 11, 13, 14, 21

T

Timpson, Richard, 4

U

US Health Resources and Services

Administration, 22

US National Heart, Lung, and Blood Institute, 14, 15, 16, 21

US National Institutes of Health, 21

W

Watson, Janet, 10, 20

Wethers, Agnes, 1, 3, 4

Wethers, William, 1

Wilkenson, Lilian, 1

Y

Yale School of Medicine, 6, 7, 8, 11, 16, 20, 24

Yale-New Haven Hospital, 16, 24