OREGON HEALTH SCIENCES UNIVERSITY HISTORY PROGRAM

ORAL HISTORY PROJECT

INTERVIEW

WITH

Robert Campbell, M.D.

Interview conducted April 26, 1999

by

Linda Weimer

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SUMMARY

The interview begins with Dr. Robert A. Campbell giving a short biographical statement before tuming to an account of his military service in the Navy during World War II. After discharge, he resumed his interrupted undergraduate education, first at Columbia, and then at the University of California Berkeley, graduating with a bachelor's degree in 1954. Having decided against a career in literature, Campbell returned to school, this time as a medical student at the University of California San Francisco. He vividly recalls several "scientific experiments" he conducted as a young boy, including one involving a stethoscope of his own making.

Dr. Campbell talks briefly about his residency in pediatrics under infectious disease specialist Dr. Edward B. Shaw. Although Dr. Shaw encouraged him to join a private practice group in San Francisco, Campbell sought a more research-oriented position. An intern of his, Dr. William Sack, suggested that Campbell contact Dr. Donald Pickering, who had just been hired as director of the nascent Oregon Regional Primate Research Center. Campbell took Sack's advice, and arrived at UOMS in 1961 as an instructor in pediatrics and pediatric biochemistry fellow under Dr. Pickering. Campbell gives his lengthy eyewitness report of the events leading up to Pickering's resignation in 1963.

When Pickering left, Campbell turned his attention to the Department of Pediatrics, which he found understaffed and underfunded. He talks about his fundraising activities, and then turns to a discussion of the various pediatric clinics and the research being undertaken in the department. A specialist in the kidney, Campbell also worked with the kidney transplant program at UOMS and did follow-up care of the first transplant recipients, twin thirteen-year-old girls. Campbell also describes the first true pediatric renal allograft transplant, conducted by Dr. Russell Lawson on a sixteen-monthold infant.

Campbell goes on to discuss the relationships between the Department of Pediatrics, the Crippled Children's Division, and Doernbecher Memorial Hospital for Children, indicating that there were conflicts between the Pediatrics Department and CCD over funding. He briefly touches on "town-gown relationships," noting that he was often called upon for extramural consultation. He also addresses the question of curriculum reform at the medical school, but asserts that the key to any good program is the quality of the fellows that can be recruited.

The discussion about teaching swings around to a consideration of Campbell's own research, and he talks at length about polyamines before returning to the topic of students. He recalls some of the minority and women students he worked with, noting that his suffragette mother had instilled in him an ethic of fair play. Campbell goes on to lament the dehumanizing effect of technological advances in bedside care and gives his opinion on the future of medicine. In closing, he reflects on his long and successful career in pediatrics, and points to a lengthy list of things he still hopes to accomplish.

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Interview with Robert Campbell, M.D. Interviewed by Linda Weimer April 26, 1999 Site: History of Medicine Room Begin Tape 1, Side 1

WEIMER: This is an oral history interview with Dr. Robert Campbell. The date is April 26, 1999. We're in the History of Medicine Room in the Old Library Auditorium Building, and my name is Linda Weimer.

We ask everyone, all of our interviewees, where they were born and raised.

CAMPBELL: I was born in Toledo, Ohio on December 21st, 1924. I grew up in Toledo until I was eighteen and joined the Navy and went in the service. But I spent many, many summers with wonderful grandparents in Iowa and wonderful uncles who were farmers there.

One uncle who was a professor of botany at Iowa State College went on to become sort of world famous; and I later drew on his resources when I went to China to lecture all over Eastern China, because he had been there and had taught the Chinese how to do seed testing and how to prevent smuts and that sort of thing. So when I mentioned his name, I got royal treatment when I went to China, and then I gave my lectures to all the pediatric departments in Eastern China. It was just an awesome thing.

WEIMER: Well, for the record, why don't you tell me his name, your uncle's name?

CAMPBELL: Dr. Howard H. Porter. He was a delight. He died at 92, and I went to see him in the nursing home, and I had these pictures when I'd come back from China and I showed them to him, where his lab had been in the University of Nanking. And he didn't see me for a while, and all of a sudden the light went on, [pauses] and he said, "Robert, you came to see me!" And he died six months later.

WEIMER: He was obviously very important to you.

CAMPBELL: He was a big man in my life.

WEIMER: Where did you go to college?

CAMPBELL: Oh, I started out at Ohio State and had one term before I joined the Navy.

WEIMER: Was this during the war?

CAMPBELL: Just before.

WEIMER: So you enlisted before the war?

CAMPBELL: No, when I enlisted the war had just started.

WEIMER: And tell me briefly about your war experiences. Were you abroad?

CAMPBELL: Oh, yeah. I trained at Great Lakes Naval Training Center, and I went into the quartermaster program, which is—in the Army that's underwear, and in the Navy that's celestial navigation and that sort of thing [laughter]. And I got to be pretty clever at it, and also on a small ship you have to do signaling, so I was an expert in top-deck signaling and how to help the navigator keep his chronometers and sextants running right and doing all that sort of stuff for the Navy.

So anyway, that's where I took my basic training. Then we went down to Norfolk to get anti-submarine training. From there we went to Mare Island Naval Shipyard to pick up a ship where they were building them, and that was of course just north of San Francisco, and after shakedown to San Diego we took off for the Pacific; and we were out there two and a half years, and we got a Jap sub and three kamikazes.

WEIMER: That's a long time in the Pacific theater.

CAMPBELL: That's a long time, yeah. I was glad to come home.

WEIMER: After the war you were discharged?

CAMPBELL: Oh, yeah. You bet. They wanted me to stay in, you see. That was sucker bait: "We'll make you chief." I was one of the youngest guys to have his papers in for chief, but I looked too young and they thought I was too young to be a chief quartermaster, so when I was ready to be discharged they said, "Hey, stay in, and we'll make you a chief." No way.

Both of my parents were professors, you see, so I came from a different kind of future outlook, and I knew I wanted to go somewhere, but it wasn't in the Navy. I loved the Navy, I just loved it to pieces, but I didn't want to stay in it.

WEIMER: Did you go back to school after the war?

CAMPBELL: I went back to Ohio State for one term, and then my dad said, "Why don't you go to an Ivy League school?" And he knew a lot of people back on the East Coast. He had become very prominent in the advertising business. So we took the train back to New York City, and I started at Columbia.

WEIMER: [Laughter] Oh! And what were you studying?

CAMPBELL: Philosophy and literature and writing courses. I was going to be a great American poet and novelist.

WEIMER: [Laughter] Well, something happened along the way.

CAMPBELL: Well, anyway, my dad died of a brain tumor, and my sister had had this love affair with this captain on a destroyer, and he took off for San Diego to go back to his wife and three kids, and she had a nervous breakdown. And my mother couldn't handle it; she'd moved to Iowa. And so I had to go out and take care of my sister, a long-time process. She just died a month ago, and I had to bury her back in Iowa. Kind of difficult. We're still going through the lawyer stuff and the conservatorship business and all that, you know.

But anyway, so where were we? So I was at Columbia, and then my dad died and my sister had problems, so my mom asked me to quit Columbia and go to the West Coast. She was out in San Francisco. She was a very fine artist and was working for a company doing advertising work, doing artwork.

And so I went out there and enrolled in Berkeley—and God, Berkeley was great then! I mean, it was a great university before there was all the junk, you know, and trappings. Like the kids would say, "You guys coming back from the war, you're wrecking it for us." [Laughter] We'd get down in the front row and put our rubber armbands on and our green eyeshades and get all the four-points, you know. We were tough. We weren't there to Mickey Mouse around. It was a different state of mind, let alone several Nobel laureates flitting about. And these kids were okay, but they didn't understand—they were going to be the kids—have you read Brokaw at all?

WEIMER: No, I've heard about it, but have not read his book yet.

CAMPBELL: It's awesome. I've got the book, and I've got some other things he's done, and the guy's right on. Not just that we were the greatest generation, but also that we had the work ethic coming out of our ears—because we had to have it or we wouldn't have survived through the Depression.

When I was seven years old, I was making money. I had to. You know, we were poor.

WEIMER: The Great Depression affected your family so much that you needed any money...

CAMPBELL: Oh, yeah, I peddled papers, two routes, and sold pussy willows in the spring and shoveled snow in the winter and mowed the lawns in the summer. Took all the milk bottles back to the stores. It was tough, so every little bit counted. But things got

straightened out, and my dad's business prospered.

So, anyway...I married my wife then. I had known her before going into combat. The war had started, and I was in training at Great Lakes. We'd go up on liberty to Milwaukee, and so we'd go up to the USO dances, and there was this cute little girl with a red polka-dot dress, and I went across the dance floor, and I said, "Boy, you get there first, Bob." There was this tall, handsome redheaded guy, and I just beat him by a little bit, and she looked so disappointed that she didn't get him [laughing].

But anyway, I wrote her a lot, and she became impressed with my intellect, my vocabulary, and gentility and all these things. And so we wrote all through the war. And my daughters found some of the letters upstairs in the attic, you know [laughing].

But anyway, to make a long story short, she came out to Berkeley and we got married, and she helped put me through school then so I could finish up in earnest, because I had to work downtown in Oakland six hours each evening and that sort of stuff, and then I worked on the railroad for a year. I had to quit for a year. And we had a little baby, our son Robert Perry, who grew up to become a physician. So it was kind of tough for a while.

And then I got tired of literature and I decided I didn't want to spend the rest of my life teaching disinterested young people about, you know, Chaucer and the minor poets. Although it's beautiful, and I loved it, and I wrote poetry myself, but that wasn't for me.

I'd always been terribly interested in science. I'd blown up the basement when I was a little boy. I had done things that you wouldn't believe. I had charted the city with maps from a kite-mounted camera in the air, and I blew up bombs all around town, but they weren't the kind they do today. Fourth of July bombs: I made some really beautiful ones that everybody in the neighborhood got so mad at me for doing them. They really rattled the windows, but they knew that I was a good kid.

Anyway, so from then on after we had our little boy, and when we got him till he was two and a half, and I quit working on the railroad—I was a mud hop—and got off of that. And so I decided I was going to be a doctor.

WEIMER: How did you come up with that decision?

CAMPBELL: Well, I had always been terribly interested in science, and I was good at it. And so—no, I had always wanted to be a doctor. In fact, I can remember when I was in kindergarten, and I had to lay across the abdomen of our principal, Ms. Bear, a wonderful teacher with a big, black mole on her nose, as she dug the clay out of my ears because I had taken my homemade stethoscope and was checking it out on all the children, and all the clay got stuck in my ears. So I remembered her for the rest of my life doing that.

We made sure that nobody went to her house on Halloween. She just lived a block

away, and she was protected by the rest of us from ever getting into trouble with us kids. Ms. Bear: grand old kind of chubby Jewish lady with warmth and love that you can't believe.

So anyway, at that point I was looking around for what I really wanted to sink my teeth in, and my wife was willing to commit to my going back to school and taking all the premed courses because I had all the rest of the stuff. I was becoming a perennial student, you see. And so I went back to school and took the tough stuff—the washout courses—all in a row. I compressed it.

And I suppose that's one of the reasons why I got in—the first year I applied to eleven medical schools and didn't get into any. My wife and I were terribly disturbed. We had little money besides, and it was not as cheap as today. We lived in a veterans' village, we were all post-war veterans, and some of the wives were really brutal to her. They said, "He'll never get in; he's too old." See, I was older to begin with at this point. I was 28 by the time I applied the last time for medical school. But the first time I think I was mid-27, and so because I'd had all this other cultural stuff that I'd been messing around with, being a great writer and trying to understand why all these wars and all these problems happened, too. I was very philosophical and concerned with the human race.

But anyway, dear lady, I proceeded to get myself wired up because I said, "No, we're going to do it one more time." And we did it one more time, and I got into five medical schools. I got into Cal San Francisco; I got into a new school in Los Angeles, Cal Los Angeles, which was only three years old, and that was the only one that called me back three times and asked me, "Please come down here," you know. But I got into San Francisco, a great school. And one of the years that I was there as a medical student it was ranked at the top—it was number one in the nation over Harvard. Just for your knowledge that it was a remarkable place. Had great professors.

So anyhow, I graduated. But by the way, as I was coming up—I was Phi Beta Kappa, and you probably saw my merit badges here, and I was Sigma Xi, Alpha Omega Alpha, and Gold-Headed Cane, those are top honors most places. And I got one of the twenty nationally awarded Wyeth Laboratory fellowships. It was pretty nifty when you're a resident in pediatrics to get \$200 per month extra. I don't know if they have them anymore. I called my wife when the letter came and told her to give her boss in the radiation lab one month's notice. Three months later, she was pregnant with the "Wyeth" twins.

So I took all the top things without ever trying because I just loved medicine so much. I mean, it became a *cause celebre* with me, inside me, and I just had to embrace it. It was like something that was beautiful. I honored and respected my professors much.

WEIMER: So you graduated, and then internship: what did you decide—where was that?

CAMPBELL: That was right there.

WEIMER: At the same school?

CAMPBELL: When we were freshman medical students they asked us to go and have a lunch with a group of professors in the field we'd like to get into, and I did pediatrics when I was a freshman. And so for some strange reason when I'd finished I was still doing the same thing. I was interested in pediatrics. Although—it seems funny, Linda—every sub-field I went through in medicine, I thought while I was there, "Boy, this is the one I want to be in," you know. It was like beautiful fruit on a tree.

WEIMER: You were interested in everything.

CAMPBELL: It was terrible. I was torn apart. But I loved them all. And there were only a couple people that turned me off on certain things because they were not nice people. There was one in obstetrics that was a little bastard, and we took care of him; we sent him to a psychiatrist. Four or five of the students, we testified against him because he was not right. He was beating up on the black women in the county hospital, physically; when they wouldn't have the baby right away, he'd beat on their bellies.

WEIMER: How awful!

CAMPBELL: Oh, he was a monster. And so we got him into psychiatry. There were only a couple of those. The rest of them were princes; they were really great guys.

Okay. Now. So here we are. We're going to start our residency, and—oh, in the meantime, I had worked as a research assistant summers for Dr. Howard A. Bern, who was a brilliant, brilliant basic scientist. I cared a lot about that man because he taught me so much and had such a wit and sense of humor. He went on to be a member of the National Academy of Science. Brilliant man.

Then, okay, I go through my residency. I had Ed B. Shaw, who was famous for what he'd done in the field of polio and that sort of thing. He was the infectious disease man. I cared for the last wave of polio admissions at Women's and Children's Hospital in 1959 as immunizations took hold. And so I finished my residency, and I had to do something else because I wasn't satisfied: I was curious. I'd always been terribly curious about everything. That's why I blew up the basement with hydrogen gas, you know.

WEIMER: Was that when you were a young boy?

CAMPBELL: Yeah, I was about nine or ten. The other neighbor kid and I should have been dead because we had two large gallon jugs, we had displaced the water for the hydrogen gas by the generator, and then we were testing it to make sure it was pure; and it wasn't, much to our surprise. And one of them blew up then, and a piece of the bottom of that cider jug went halfway through our coal bin. You know, it was about a slice as big as your hand; you know how glass when it's sharp will just cut you to pieces. We felt it pelt our chests and all, but it never hurt us. We were so lucky.

But anyway, life was like that. We were full of risk-taking and all that stuff when we were young. We made a ski jump and I almost got killed.

Okay. So then I was about ready to finish my residency, and I was at sixes and sevens as to what I was going to do. And there was a top group that was associated with Dr. Shaw which was a private practice group, and he said, "Go with them. They're the best in San Francisco, and I'll recommend you."

So because I'd been also a Wyeth fellow and had all these other things, I had pretty good credentials—I had the best you can get, I guess, credentials or something like that. And I just couldn't go into private practice. The whole idea of doing that just appalled me. You know, it's too routine. I'm not a routine-er. I'm a thinker and a questioner and a doubter. And that was where I wanted to go.

And so I talked to one of my interns at that time who was taking his internship from here, Oregon. His name was William Sack, an OHSU psychiatrist who just retired here. Do you know Bill Sack?

WEIMER: No, I don't.

CAMPBELL: You haven't interviewed him?

WEIMER: Not yet.

CAMPBELL: Well, call him and tell him he'd better get his butt in here.

Anyway, Linda, Bill told me, "Bob," he said—he was really impressed with me—and he said, "You know, you ought to go up and work with this guy Pickering." I said, "Well, who's he?" He says, "He's going to be one of the top primatologists in the world. He's building a primate center up in Oregon." He says, "I worked in his lab two summers. The guy works night and day." So he said, "I can give him a call. I know he has fellowships."

And so I waited and pretty soon I got this call from this guy who said, "I'm going to be flying down and going through San Francisco to Washington to an NIH meeting. Why don't we have dinner in the airport, and I'll take an evening flight back"—a 'red-eye,' he called it—"back to the East Coast."

So I met the guy, and he had charisma and dynamism—he had it all. And that's why he was here, and that's why he was building this primate center. He'd already been in *Life* magazine. They had a full page on him.

WEIMER: On Donald Pickering? Life magazine had an article on him?

CAMPBELL: Oh, yeah, with Dr. Nicholas Kontaxis who was his assistant, showing him with a primate monkey, and then they had a full page on Pickering in *Time* magazine. He was no slouch. You didn't know that?

WEIMER: No, I haven't done that much research on Pickering.

CAMPBELL: Well, nobody probably does around here because there was a lot of hostility to him. I don't think it was properly generated because I was his fellow, and I saw what he did and didn't do. He made a couple of mistakes, but they were not major mistakes, and they were fixable. Compared to his great effort and large accomplishments, his shortcomings were small.

So anyway, that was a long, tragic battle between then-Dean Baird and Pickering.

WEIMER: So for people who don't understand the organizational chart up here, that was Dean David Baird who was dean of the Medical School, and Donald Pickering, who was...

CAMPBELL: He was chairman of the Department of Pediatrics.

WEIMER: But who was also the director of the Primate Center.

CAMPBELL: Which was being built. He had a \$6 million award or something like that.

WEIMER: As director of the Primate Center, he wasn't directly under Baird, was he?

CAMPBELL: Baird wanted it that way, the way I get it, because there was a lot of what they call indirect money—what's it called?—there's money you get from a grant, and...

WEIMER: Then the overhead cost...

CAMPBELL: Overhead. That's it, overhead. And you know, that would be about forty percent on a big grant like that. And I think it was never openly discussed, but I think one of the reasons that Pickering's job situation there was in such jeopardy was because of the overhead—because that's where Pickering and Baird got to fighting, over who was going to be in charge of accounting for the Primate Center money and the cash flow and all that sort of thing. Don had also become a medical celebrity—national magazines and local TV. Commentator Tom McCall featured him. So it was fame and money.

WEIMER: And it was a great deal of money.

CAMPBELL: It was a great deal of money, you see. So that's what I saw as the major conflict between these guys. And then Don had done all the work, and D.W. Baird was just coming in along, holding out his plate, you see—that's the way I saw it. And while David was not a bad man, he wanted it for himself; he wanted control, I think. Even if it wasn't his baby, I suspect he wanted control.

It's never been properly discussed, and I don't know that it ever has to be properly discussed. There is much more I could tell you. Maybe it's best to bury it. But I know Donald Pickering never recovered because of what they did here. One of them was in the psychology department—I won't mention his name—but he held a meeting in the pediatric department, and one half of those there walked out during his attack. And then there were a couple of people downtown, prominent businessmen, who worked in the MRF [Medical Research Foundation]. These were prominent people, and they got up and talked to reporters and shouted, "This guy is mentally unbalanced."

I'm pretty smart, honey; he was not mentally unbalanced. I had worked in the mental health clinic down at Cal, and I'd also been invited by the Department of Psychiatry to take their program because I volunteered for a whole summer in psychiatry down there. That wasn't what Don's problem was. He was too energetic and too bright, and I'm afraid he perhaps was annoyed with people that didn't have the vision and the drive that he did and that were more pragmatic and wanted—you know, whatever.

So it became permanently bad at the Primate Center. I'll tell you what happened. Here we're sitting out there at the Primate Center, at this new building that he had built, a small one, and there were primatologists from all over the world coming, leaders in this field— primatology was a relatively new field, where they studied the primate because it's so close to man, and that was what was so exciting about it, because they were studying fetal life and how the little baby primates related to their mothers and all this sort of thing. There was a lot of 'grand opening' excitement at that time, maybe you know about some of that, I don't know.

But anyway, Dr. Pickering and Dr. Baird had kind of had sort of a falling out—in fact, they had a falling out, and it was so bad that when this big international event took place, Don had the head of Medicine, Hod Lewis, sit up on the place where you would ordinarily have the dean. And the mistake Don made as a politician was he didn't get up and eulogize the dean and say, "We never could have done this without him," even though he probably obstructed every step of the way. [Laughter] You know how you tell these white lies, like, "Honey, your dress is beautiful"?

So that's what happened. And as a result, the dean sat in row four and was totally ignored. And here's Hod Lewis, head of Medicine, sitting up on the dais with all these dignitaries from around the world who were specialists in primatology.

So my wife and I sat with a Nobel laureate for dinner that night. It was big-time stuff. I

was a country boy, you know. That's about the time the psychiatric propaganda started.

That's when they started going after Don's personality and that he was unstable and these things were let loose to the press. I felt that it was a scurrilous attack on a man who didn't deserve it, and it's the kind of stuff that's done—when you can't get them any other way, you get them on personality, as the saying goes. "He just doesn't fit in," you know, that sort of thing that you hear done. There were jealous faculty and those who coveted the new Primate Center as a place to do their research.

That's how I saw it, and do to this day, and judgment—the old business was "leave her to heaven," and that's where the judgment's going to have to be, and not with me. But I know where I was at the time, and I didn't like what I saw. Fact is, I was so upset, that's why I wrote the governor that letter, which you have, outlining what I knew about it, because to me it was very depressing to see people really of such caliber doing this to each other, you know, over things that I thought weren't worth it. Shameful! I thought of leaving.

WEIMER: Your fellowship at this time, what was that for?

CAMPBELL: It was for pediatric biochemistry, a U.S. Public Health fellowship, which was—Don did it that way so he could have a very broad sweep, to put you into whatever program you wanted to. He was a man of very broad vision—what you'd call a wide-angle mind.

So he was a pediatric endocrinologist by trade and brought his monkeys up from Cal. He was Cal-trained, also. So he had a nice small group of primates which he brought up and which he took with him when he had to leave, when it got so bad, when the heat got so bad. They just crucified him. It was a public crucifixion. And so he said—"The hell with it" is how he finally put it. They knew if they got him mad enough he'd resign and leave; and he took his monkeys. He went down to Tulane, where he had an old friend who was a professor, head of the program.

Anyhow, the fellowship was very broad in its base. So you had to do everything. It was very hard on me because I'm very conscientious, and I think it was more than I should have had to do—because Don had to be gone a lot of the time out there at the Primate Center, traveling, politicking, and I was kind of left doing all his lecturing for him and running around trying to make things right. Well, in a way it was one of the greatest opportunities a person could have, but it was too much of an opportunity, you know. It was devastating to my family; it was devastating to me. It almost destroyed me. Really, it was very difficult.

If I had to do it over again, I wouldn't have done it. I wouldn't have come up here, you know. I went to see Herb Woodcock because I was under that terrible stress and I needed help, and he's a wonderful old psychiatrist, you know. And Herb went over my C.V. with me, and he said, "Bob, you shouldn't have come here." I had turned down a fellowship at Harvard. Instead I came up here. And you know why I came up here? Because I had the

sister who had the problems in San Francisco. I had to keep track of her. My mother said, "Bob, you take care of your sister," you see, and I took care of her and buried her just a month ago.

WEIMER: Family obligations.

CAMPBELL: Always. Absolutely. Yeah, they alter your career plans. It's funny how that is, but it's true. People who haven't had that problem don't understand it. If you're a person who follows your family obligations, if you don't run away, if you don't go to sea—you've heard the Navy song, [singing]: "When a lady has a baby and she names it after you, join the Navy..." So anyway, that's avoiding your obligations.

So it was very difficult. He left. I tried to save his butt by going to the governor with that beautiful letter I wrote for him. And Nick Kontaxis, his Greek chemist, was brilliant. He had to go down to Stanford Research Center. Got a good job down there for a while. I lost track of Nick. He and I were very close. He was warm-hearted. You know the warm-hearted Greek; oh, God, he was great, and his wife was wonderful. They were a beautiful family. And then Don's wife died of a brain tumor prematurely. So everything went to hell in a basket.

WEIMER: It was a difficult time.

CAMPBELL: Yes. And it took me twelve years to get the department going.

WEIMER: Now, when you talk about the department, which department are you talking about?

CAMPBELL: Pediatrics. You know, by the time that slaughter took place and was all done there were only really four people left.

WEIMER: Full-time faculty in Pediatrics?

CAMPBELL: Yeah. One of them developed a terrible brain tumor, and he died. There were just three or four people left.

WEIMER: How did you go about building up the Pediatric Department, bringing in money, bringing in faculty?

CAMPBELL: Well, you saw how much money I brought in.

WEIMER: It was quite a bit. Several million, wasn't it?

CAMPBELL: Yeah.

WEIMER: So did you have a plan? How did you go about that?

CAMPBELL: Well, you had to be kind of—I suppose, Linda, you had to be a person who was looking for opportunity, and you knew it was out there somewhere.

[End Tape 1, Side 1/Begin Tape 1, Side 2]

WEIMER: This is side two of our tape one with Dr. Robert Campbell, and we were just talking about building up the Pediatric Department and getting research dollars. And that brings me to one of our themes, which is the growth of research on campus, and some people said we really didn't have much research early on, that it has only been in the last few decades. Perhaps you could talk about that in relationship to the university as a whole and to pediatrics in particular.

CAMPBELL: Well, I think with regard to that, as a connecting link to it, Linda, a lot of the early work, what you did is you got a clinical grant, a center grant, and then you used that as cover for the research you wanted to do. That's been done widely at many institutions.

So you see we have a center grant, that's not for research, basically, but what you would do is spin off some of that money for your people who are doing the bacteriological work and different subgroups. So as you look through all this money, you can see that a lot of it is not dedicated directly to research per se.

But I can tell you that if you plot this money on a dollar basis and so on that we were doing quite a bit of work for nothing in the early days because it was cheap, labor was cheap. People forget that; when you read Tom Brokaw, he talked about his mother getting paid a dollar a day for the U.S. Post Office and that's why she couldn't go to college—tuition was \$125 a year. But here we were, I could hire a pretty good research assistant for \$8,500 back in 1962 when I came here. Now you couldn't even get started, you could hardly pay their fringe benefits for that.

So there was an awful lot of work done which was done partly under the aegis of clinical testing which had to be done anyway. See, we were so early in the game that there was an awful lot of work—there were a lot of empty squares. If you looked at the all information that man needs, to know how to resolve certain problems, you can kind of square it, lots of squares. And so what we would try to do is to fill in the empty squares with data either from other laboratories or data from our own laboratories which was generated from the clinic, not necessarily from a research grant. So if you look at the research grant money per se, it's a little bit deceptive. It doesn't really tell the whole story.

I think there's no question about it that we're dealing in an era now in which research monies are huge. I'm a small-timer compared to that, you know, but I was big-time then. People would tell me, "Bob, you're a money-getter." But it's nothing compared to what they do now. But I was a big money-getter in my day. But you can see, when you see all these little grants I had to write, they consumed me. And that's one of the reasons I probably didn't get to do all the things I wanted to do, Linda, because I was so busy writing grants; and I was writing them for other people, too, fellows, I was writing grants for junior faculty and all this other stuff. I was just running around.

I'd never do that again. My wife would never let me do it again. It almost destroyed me. This place was eating me up. I had a sister-in-law, when they came to visit us she was very perceptive, and we got to talking about this and that, and she said, "I know what happened to you, Bob. You were in charge, and then it became in charge." You know what that is? It's very difficult.

WEIMER: Well, at this time you were director of the pediatric—is it the renalmetabolic lab?

CAMPBELL: Oh, that was much later. First of all, to make it work there was another young doctor who was with me who was pretty good at genetics, and he helped me set it up and then he left. When Pickering got upset, he left, too. Bob Tips, Robert—heard of him?

WEIMER: Briefly, yes.

CAMPBELL: Bob Tips was well trained in genetics, M.D./Ph.D. And so he saw the ship was sinking and so he jumped, but before he did we set up some genetic work in my little lab there. So we were doing a number of tests, genetic tests, right in my laboratory space there, which at the time was the most commodious space we had in Pediatrics. It was, you know, quite large. Multiply this by three times, four times, and you've got my space.

WEIMER: So you're saying four times the size of the History of Medicine Room, about.

CAMPBELL: Yeah. Four times that. But anyway, that's how it takes so much time to get things going. Well, he left, and so I had—we called it the Pediatric Endocrine Metabolic Genetics Laboratory, and that went to the clinic. And the clinic saw endocrine patients, and then the funny looking genetic disorders of childhood and some of the other ones like cystic fibrosis, renal pathologies, rheumatology, and so on. Oh, I saw all the funny looking kids in the state of Oregon for the first ten years I was here. There was nobody else to do it.

And the day after I got here Pickering said, "I want you to go out and get a good-sized liability insurance policy on yourself," because he knew he was going to dump his—he dumped his whole private practice on me, and I didn't want that. I came here to do research. And then he dumped all his lectures on me. He knew he had a real bright kid, and he knew he was pretty safe if he dumped it all on me. And that's what men will do to protect their turf and give them more room to move around.

Even Dr. Kontaxis, I saw him one more time after all those years and he said, "You

know, Bob, Don abused us. He used us." And it's probably true. We were so thrilled that he would ask us to do these things, you know, we almost thought he could walk on water; and we were trying to walk on water and we were falling in the puddle all the time. [Laughter] So that's it.

So we had the Pediatric Endocrine Metabolic Genetics Laboratory. That's what it was first. Then over time we shifted more and more toward other things, and we finally got—after five years, when Richard Olmsted got here, I helped him recruit a real bright young endocrinologist from back East, Harvey Klevit, to come. Well, Harvey came, but he didn't stay here very long. He went over to Kaiser because that's where the money was. Several of them did that. So Harvey and I have still been reasonable friends.

So we lost our endocrinologist for a while. But he did come into the clinic to see the endocrine patients, you see, and then he would have most of his testing done through the chemical departments in the clinical system, so that we didn't have to do it anymore. Because see, originally we were doing the thyroid studies. I did the radioactive uptakes on newborn babies myself. And we did all the different thyroid studies, one of which Don and Dr. Kontaxis developed themselves.

So there was an awful lot going on early on there, and I was the only certified person in radiochemistry to treat children, either with the radioactive iodines or with calcium; and I worked closely with the people in pathology, that wonderful old guy who was a pioneer in pathology and radiochemistry—Ty Hutchens. He was a pioneer here in radiochemistry, and supported my efforts.

That's how we developed things, and then we finally—I got out of the endocrine thing, it just got to be too much, but I was left—see, this gamish of several subspecialities that they had down there which was one clinic, we got endocrine out of there, and then we got the others out. Then I spun off the pulmonary clinic—mostly cystic fibrosis—starting the first summer camp in the nation for these kids. Then the rheumatology clinic, which I co-staffed with Dick Olmsted, our new chairman. Over ten years I consolidated all the kidney patients, was board certified—1974, self-taught and in the top five percent nationally in the first certification. I ultimately took care of only the kidney then. I finally decided that's what I wanted to do. It dawned on me about ten years later that the reason I was so interested in kidneys was my little brother—he died of uremic poisoning because of a developmental anomaly in his urinary tract outflow. And probably that motivated me; I didn't realize it at the time. But I was fascinated with kidney and how to salvage these kids.

And Don had dumped all these various kinds of kids into his clinic because he didn't know what to do with them, and he didn't want anybody else to have them. I think there was a little bit of they wanted it all for themselves. They did all the rheumatology, too, including lupus, dermatomyositis, et cetera. Unbelievable. And I had to take all that over when he left. I really got dumped on. I mean, it was like they opened up a dump truck.

But it worked. It worked. I was that talented, energetic, and idealistic. When I'd go to the meetings on the East Coast, where they all were, I'd run from one specialty section meeting to another to keep up with the latest, to bring it back to Oregon. And you know, increasingly I got exhausted and more exhausted. And I got depressed. I got a real first-class depression and had to have a shock treatment. I came out of that right away. You can leave that out, if you wish. That's nobody's business. Unless you've got to have it in there. It was similar in some ways to house officer abuse that had to be stopped by law in several states, after patients were killed, or, sleepless, house officers ran off the road going home. I just—you know, it was very crushing for me. Too much.

WEIMER: So how did you get out of it?

CAMPBELL: Well, we had to get more people. I recruited more people. That's what I had to do, and I had to have money to do that, you see. So it went round and round and round. It was very difficult. I did get Foundation help to hire faculty. The school should have done it.

WEIMER: You told me that you worked with the kidney transplant program?

CAMPBELL: Right.

WEIMER: Tell me about that.

CAMPBELL: All right. Well, two things. There had been one kidney transplant done here, and that was on twins, identical twins.

WEIMER: And was that with Clarence Hodges?

CAMPBELL: Yes. And old Clarence was a sweet old guy, and he had had somebody fly out from Boston to help him do it; and I took care of those kids after they were all done. They each had had a piece of skin put on the thigh of other one. In those days you didn't have any fancy way to determine whether you'd reject or not, so what they did was took a little diamond of skin off of one thigh and put it on the other twin. They stayed on, and the last time I saw the girls these little diamonds were still there, and that was four or five years later. And as far as I know, the girls are still alive. One of them didn't want to give up the kidney at first, the one that had to give it up. She was very upset with it, but her mother demanded that she do it. There was a lot of conflict.

WEIMER: At that time, since transplants were new, I assume there weren't the systems and the safeguards to protect someone who didn't want to perhaps donate?

CAMPBELL: No. I mean, you were flying by the seat of your pants. This was done several years before I got here, the twins. I wish I could remember their names. But in fact my job was to follow these kids up and make sure that they were healthy, and Clarence let me do

that, which was fine. But that was not from our point of view the first real test of pediatric renal allograft transplant; these kids were about thirteen when they had the transplant event.

Then we got a little boy who was about fifteen, sixteen months old, and we had to dialyze him for a while until he looked like an emaciated, tiny monster. But I had a summer student who had a beautiful matching blood type, so we—this boy was so uremically anemic it was unbelievable. He'd come in, and we'd draw fifty cc's from Larry Hartley and shove it in him about once a week, you know, and kept him alive all summer. And the nurses just hated seeing me coming, and my renal fellow at that time, a very brilliant young man, wrote disparaging notes in the chart that "This boy should not be considered for transplant, he's too ill and blah, blah, blah", you know, "We should let him go in peace." It's tough.

So we finally got all the disparate interested people together as well as the chairman of the Department of Pediatrics and the chairman of the Department of Urology, nurses, myself and Russ Lawson—Russ and I were all for it. We wanted to say, "Damn it, you know, you're either going to let the kid die, or you're going to try." And we said, "We've got to try."

And so we got a cadaver kidney—we finally got permission. We fought like hell to get permission to do it, and there were a lot of bitter words and some—you know, the kind that don't quite come out, but you can smell it, you know. So anyway, we got the permission to do it, and we got a hold of a cadaver. And lo and behold, that next spring he was on the front page of *The Oregonian* riding a tricycle; everybody had chipped in and bought him a tricycle. You know! And I can't remember his name now, but we had been successful, and we had kept that kid alive long enough for the urologist, Russ Lawson, to find a kidney for him and to get him transplanted.

And so it was pretty neat. That was the real beginning of the pediatric transplant program. Russ Lawson left the school then and went back to Marquette, I think, and took over the chairmanship there or something like that. Before he left, he and I set up a postresidency pediatric transplant fellowship. Anyway, he and I have always been pretty close.

My sister was over in Katmandu, and she said, "Oh, I have a brother who's a professor at Oregon." Russ said, "Oh, that's interesting. What does he do?" And she says, "He's a kidney specialist." And Russ says, "Well, it must be Bob Campbell, then, because he and I used to work together." Meeting people in strange places.

Anyway, so where do you want to go next?

WEIMER: Pediatric Department. What was the relationship between that and CCD?

CAMPBELL: Well, CCD always seemed sort of far, far away, and it was always from our point of view kind of lackluster. It was the soft, gentle, maternal, slow-going, and wealthy part of our department. It had autonomy, had lots of federal money, and they did their own thing in their own way. So we saw the kids that came in at Doernbecher that were so damn sick we thought they were going to die before we could get started to treat them, and they, over there, were listening to some little kid with a problem with his hearing, or a cleft palate, you know. We don't diminish it. It's important but low on priorities.

Well, that's okay, but I can tell you one of the people over there, Victor Menashe was over there at that time, and he was a junior faculty at that point. When I came here he was just starting out; he'd had a year of cardiology as a pediatrician, and he was doing some of that. He was one of the few other people there besides me when I came.

It was a different lifestyle over there. Everything was entirely different. It was slowgoing and easy-going, whereas we had to crash around; you know, it was entirely different.

I do know Dick Olmsted and Dick Sleeter shared many concerns about child health and care. When the three of us were alone together, I sensed they were a bit competitive which I guess is okay between normal, leadership-driven males with overlapping turf.

Well, I just want to finish up on one little comment about CDRC. Oh, it had to do with Victor Menashe. He told me confidentially one day over the phone—I was asking for some money to treat some kids we thought might be coming down with glomerulonephritis, and I said, "You got any extra money over there?" And he did give us a little money, but he said, "You know, Bob, we've got a real problem that we can't talk to anybody about." He said, "You know, we spent \$8,000 on every one of these kids that come in here with Down Syndrome, and then you come begging for some money for penicillin, and then if we don't give it to you, we're in bad trouble, you see."

What he was saying was it's all right to give money—children with Down Syndrome are sort of at the bottom or the heap in terms of survival and what's important. But if you've got a normal kid over on the east side of town and he has severe streptococcus and could get glomerulonephritis or heart disease, he may not get anything, see. And I was kind of kicking that around with him, you know, and that's when he told me, "We really feel bad about some of these things, you know, but we just don't have the money."

WEIMER: We have had Doernbecher Children's Hospital here on the campus since 1926. What was the relationship of the Pediatric Department to Doernbecher, and yourself to Doernbecher, through your career?

CAMPBELL: That's where we did it, and that's where the action was: that and the clinic. So that was our home, Doernbecher, including good old Dr. Bilderback. He used to come up on Saturdays when we were up there. We'd have Saturday coffee, see, every Saturday, and he'd come up and sit in the library where we all did that sort of thing. That was before the work ethic said you don't come in on Saturdays and you have a little buzzer and all that crap, you know.

WEIMER: A pager.

CAMPBELL: A pager, mm-hmm.

WEIMER: Can you tell me a little bit about Dr. Bilderback? I know he's one of the legends in early pediatrics in Oregon.

CAMPBELL: Well, I can say this much, that he had tremendous enthusiasm, and he stimulated young people to learn. I don't know what he really had to offer at the time I was there in terms of anything concrete, but he certainly was a pleasure to have around and the students loved him because he would just get them up, you know. It's like grandpa coming back and saying, you know, "What are you doing now in school, boys?" [Laughter] You know, he was that kind of a person: curious, asking questions, waxing philosophical and spreading praise around like butter on bread.

WEIMER: Changes in clinical practice at school: we'd gotten the Medical School Hospital in '56, and we still had the Multnomah County Hospital, and of course there was Doernbecher Memorial Hospital for Children. How did clinical practices change in pediatrics?

CAMPBELL: I can't tell you much about that. They'd already been changed when I got here, you know. Of course we did a lot of changing, but it was all in the mainstream of change, it wasn't anything really new. See, I came in '61, and that puts me in that decade, and so I can't talk about these subunits or subsections very well. It was after the historic "town and gown" fight. We had a few general pediatric faculty but two specialists, myself and one other.

WEIMER: Did you have a lot of volunteer faculty in pediatrics in the '60s?

CAMPBELL: I can't tell you much about that except to say that I know Robert Meechan had two or three people in his clinic. But I—well, no, that's not quite true. I had one practicing pediatrician who would come and work in the kidney clinic with me for several years, but that was it. Harvey Klevit and Raymond Blair helped a long time in the Pediatric Endocrine Clinic.

WEIMER: Were you aware of a predominance of volunteer faculty in other departments, or were you just involved with pediatrics?

CAMPBELL: I don't know anything about any other departments, no.

WEIMER: One of our themes is the image of OHSU from inside, perceived by people working inside, and then from outside the area. Let's talk about that for a few moments.

CAMPBELL: You mean how the people feel about the school?

WEIMER: Mm-hmm, and now of course the university, but it was the Medical School for so long.

CAMPBELL: It used to be a warmer place. More personalized. Of course, you've heard that a lot, I imagine.

A lot of these things do change. I can't really speak to it anymore. I've been out of the loop now really for about eight or nine years, and so I know there's been—you know, as always there's some discontent, and I don't know who it's coming from or why, but every once in a while I hear it, you know.

WEIMER: How about town-gown relationships through the years?

CAMPBELL: Never knew anything about it because everybody wanted me to come and help them. When I got here I was the only pediatrician that I knew of that was called to Emanuel, Providence, St. Vincent, or to the Wilcox nursery at Good Samaritan once in a while. We'd see patients there. We'd see quite a few patients over at Emanuel.

See, a lot of the guys who were in with Bilderback, in the Bilderback Clinic, knew me, and they trusted me when they had a real sick kid, like meningitis, acute renal failure, nephrosis, or aspirin poisoning; they called Bob Campbell. I was Mr. Fix-it for about ten or twelve years. I was ranked very high intellectually because I really was extremely well trained and took top honors and came up here from a top school. And I never talked about it to anybody, but the word gets out, you know, "Bob's pretty good stuff"—because I did it right.

And so I had a lot of interaction with these different people who were so nice, who were in the programs mainly around Portland. Then I did get a lot of calls from downstate when it was something that they thought I'd be interested in. Got a lot of referrals from downstate for various and sundry things, calls for advice from the Salem pediatrician taking care of the governor's son and daughter.

I took care of all the girls with Turner's Syndrome for the first ten or fifteen years. I had a collection of those, and I had a collection of diabetics. I did all that stuff, till I could spin it off to some younger person, you know, because I didn't have any help. I had many such categories; I had thirteen diabetic children that I followed myself. Which is quite a nice number.

WEIMER: You've been a teacher. There have been a lot of curriculum changes, and controversy sometimes on which department gets how many hours and stuff like that. Can we discuss curriculum changes and training changes since you started in the early '60s?

CAMPBELL: Well, when I first got going here, you may see the huge list of—maybe you haven't started counting the list of young people that I had in training.

WEIMER: I didn't count, no.

CAMPBELL: Well, it's an unbelievable number of young people that are on this list, and you don't have to worry about it. You have a C.V. there?

WEIMER: Yes.

CAMPBELL: Look, there's fifteen, twenty, thirty, and all of these, maybe fifty, and another thirty, forty—about a hundred fellows at various levels. That's quite remarkable. I didn't have a big program, either, see, like the money that's presently supporting the really big programs around here, where there will be maybe three or four fellows running around at any one time. I was just a little country boy who came up here from Berkeley.

But what I'm trying to say is I think one of the key things you had to have if you were going to run a decent program is you had to have bright young people as fellows who can act as runners, who can get out there on the battle line and who you can trust and train, and then trust them some more, to get the job done and to come back to you; and then you go out and make rounds with them, and they can write the notes, and you tell them what you think they ought to be doing. So that's how we worked it. Additional payback was their interactive stimulation of me and enlarging my knowledge base.

So fellows were terribly important, and also then we recruited some of the fellows onto our faculty that way, the ones that were really sharp and we wanted to keep.

So this is how—part of our training program was based on these kinds of people. And I estimate I also lectured, or educated, over 750 medical students during my career. And it was funny: when I was sick down at Good Sam, the last couple times I've been down there in recent months, three of my former students on staff came in and talked to me. So it's amazing how this all kind of comes together.

But that's part of the approach is developing these kinds of things. It's not just all lecture halls—although I had four or five areas of lecture responsibility. It's mainly one-on-one. This is one-on-one teaching. I think you understand that. Which is not just for anybody.

So that was very big in my life. Not many people did this at the school early on. Some of them gave their Saturday lecture and went home, and that was it. But I was never one of those.

So I don't know if I'm answering your question or not.

WEIMER: Well, I know you were on some curriculum committees.

CAMPBELL: Yeah, I've been on several of those.

WEIMER: What was their main focus?

CAMPBELL: Well, the committees I contributed most to were those that had to do with general pediatrics and the kidney. I tried to get coverage of polyamine science into the biochemistry lecture series, but failed. There was inertia. We had statewide committees, and we were involved with that. So we were just upgrading and organizing and codifying existing programs so they weren't sprawled out, getting them all together.

And I worked with George Porter, mainly with George, and Dan Dennis, vascular surgery. Dan Dennis, George Porter and I developed what was called the Fluid and Electrolyte course, which was innovative and extremely popular with students here. That was one where you made sure that the people got the right kind of IV fluids; and there are many different kinds depending on the circumstances. And so that went, and that was one thing. And we just did hundreds of things. We were just spinning stuff off all the time. You know, we'd walk down the hall and start a subject, and pretty soon we're spinning off another program because we were those kinds of guys. The time was ripe; it was needed. Oregon was a green apple, and we were going to make it red. We were all creative.

[End of Tape 1, Side 2/Begin Tape 2, Side 1]

WEIMER: This is tape two, side one of the interview with Dr. Robert Campbell. And you were just telling me about walking down hallways with George Porter and Dan Dennis and spinning off ideas.

CAMPBELL: That's right. But then, you see, we were also involved in bringing an awful lot of stuff back from outside the community. And then we had an awful lot of students that we were very fortunate to have because they added to our program, too. It's a two-way street, you know. All this sort of thing is.

I always got an awful kick out of my students. I mean, that was half the joy of the job, was coming in in the morning and having them ask me a challenging question or something like that, you know. And then being able to answer it, you know, that's the real charger-upper.

But anyway, you have this miscellaneous stuff; it tells you an awful lot. I did a lot of peer review work for journals and for grants and that sort of thing. I set up the first summer camp for cystic fibrosis kinds in the nation.

I don't want to beat things to death here. Now, there were some things that I do think that we should mention, and I don't know if anybody else has ever commented on them. We did make some metabolic discoveries. One had to do with tyrosine metabolism, and that was just one. It led to eight or ten papers being published by OHSU and Primate Center investigators. But the polyamine research is our major contribution. You may know about that.

WEIMER: Well, I don't. It's mentioned in your resume, but resumes don't tell everything, so why don't we discuss that for a little while?

CAMPBELL: All right. You see, polyamines—I'm still trying to get them moving, and here I am out of the loop. I have all those boxes at home I've got to go through and clean up. It's unbelievable. But polyamines, for those who are sophisticated, and I'm being snotty now, and up-to-date in their science, are absolutely essential for normal cell growth. And I'll give you an example that tells you something that's unbelievable.

I started with this stuff back in '73 when the first little tiny monograph was published on the subject. That was by Seymour Cohen, and it was called *Introduction to the Polyamines*. Well, these are little tiny compounds, they're just little squiggles, but they're inside the cell and they serve as cell glue. I was curious as to whether these compounds caused mucus to be think and damaging in cystic fibrosis patients. And what I have shown in my work—and if you looked at all the titles here in the back [of the C.V.] that have to do with polyamines, you'll begin to see that what I have reported is what happens when these things get outside the cell in quantity.

They don't belong outside, and when they get outside they damage tissues and they cause acute renal failure, pulmonary problems—just a whole host of serious, serious problems. And so I really got excited when children who had uremic poisoning and were vomiting and we dialyzed them, when their polyamine levels came down, and their symptoms abated. They were elevated because they couldn't pee them out. See, either you get rid of them through your liver or your kidneys; you've got to have them both. But anyway, these things don't belong outside the cell in any quantity, just a tiny bit, and then you urinate those out.

But these are the things that cause growth, and here's a beautiful example. All living things require polyamines to grow. That is a living truth from Dr. Bob Campbell, [laughter] and it's just pretty awesome. But anyway, here's one of the things that was shown, I was giving a paper down at Duke on acute renal failure, and I had a good friend down there who had been working on polyamines in babies, a really brilliant guy. He was working with a lovely lady who was down in Florida who was a student of newborns.

And I'd heard him talk at a Gordon conference about his early work on rats, and he showed that if he had the baby rat—the pup, he called them—locked into a little screen where it could be fed up to the mother's nipple, it would take the milk in, but it wouldn't grow properly. And he also noted that in order to get it to grow, he had to lick it with a camel's hair brush with warm, wet saline, which is just like saliva. Okay? Light bulb goes on.

So he measured the polyamine levels in the brains of these animals, and guess what? They were elevated. Ah ha! So he then starts working with this wonderful woman down in Miami, and what they did is they took premature babies, human babies, and she would massage them and measure the polyamines, and she would compare: here's a baby over here that weighs four pounds, here's a baby over here that weighs four pounds, and she would give them the identical caloric intake, same amount of calories. And the one that got the massage five or six times a day grew about twenty percent faster. And that's been published now repeatedly. And what do you think caused it? It starts with a P...

WEIMER: Polyamines.

CAMPBELL: You've got it. She was turning on the polyamines through tactile sensation. Not the camel's hair brush, the tongue of the mother rat, but humans are very sensitive to tactile sensation.

So that was one of the first things, and I wrote that all up and published it in a book on polyamines in clinical medicine. So I've done a lot of stuff like that. I've got five key papers I haven't had a chance to get out, and I don't know if I will in my lifetime. I got a telephone call on Saturday from one of my best friends back on the East Coast scolding me. He said, "You've got to get this stuff out." "Well, I haven't been well enough. I've been too tired." It's helped me to talk to you, though.

WEIMER: Well, good. I didn't want to tire you out, also.

CAMPBELL: No, it's helped me to have you ventilate me—not hyperventilate [laughing].

Okay. So polyamines—and there's only one guy on this campus that I know of that's doing any work on polyamines. So anyway. But I have five known diseases which I think, when the polyamines get released from the cells—see, the number of polyamines inside your cells is a thousand times greater than outside. So when you have cell damage, what happens? It comes out, and it doesn't belong out there, and it damages the cells.

So that's what I've been trying to—I've been writing and trying to get people to pay attention to. I started the first book series, *Advances in Polyamine Research*, in the late seventies. But it took—how many years did it take anybody to pay any attention to insulin, and look at all these different diseases, how long it took. And a friend of mine keeps saying, "Well, Bob, you've just got to take it easy. Enjoy your gardening—let it go." But this guy on the East Coast called on Saturday, he's a brilliant genius, he said, "Bob, goddammit, get yourself in shape." He said, "I'm going to be calling you twice a week to make sure you get this stuff done."

Well, you know, I'm just not in good shape. But I'm trying.

WEIMER: That's all anybody can do, is give it a good try.

CAMPBELL: Right. And I don't want to get down again like I did twenty years ago. That was awful. I just had one terrible experience where I just couldn't get out of bed. Okay.

WEIMER: Let's move on to minorities and women.

CAMPBELL: Okay. Well, as I told you earlier, I've always had an affection for minorities. I've always felt in the minority all my life because I'm different, and I acknowledge it because I know I am, and it doesn't bother me. But there is something about certain individuals that are in the minority and they have a great passion for minority people, even though they may not be in a classified minority, and I think I'm in an unclassified minority.

But the ones that come to mind, there are two in number who are black, the only two that I know that we've had here. One was a girl that I believe I mentioned to you, who was a resident here and then left because she couldn't stand the place. And I liked her so much, and she liked me. You know, when you vibrate to them, they get it. And she went down close to someplace in the Delta region of Mississippi. But she suffered a lot while she was here. Nobody treated her really well.

The second one was a black man here; he was a junior medical student who got in a lot of trouble because he was afraid to be a doctor. And he was on the wards, and he'd come in half a day late, "Oh, my car's busted, and this is wrong and that's wrong." That wasn't what was wrong. The problem was he felt he didn't fit in.

Finally after a month, I was on ward service, and I talked to him, and I said, "Look, you've got to go talk to somebody because, you know, it's not working out for you." I said, "It's nothing wrong with you, but some problems that you've got are getting to you."

And you know, he took me seriously, and he went and got some help, and he never came back on the ward after that. I don't know what ever happened to him. But he wanted to be an anesthesiologist, and that kind of struck me as funny because, you know, if you're afraid of being around people, you put them to sleep. [Laughter] That's true. He was a sweet boy, kind of tall and husky, but real sweet.

So that was the blacks. I have not had any—oh, the most brilliant woman I ever had work for me was Elsa Jacinto, and she came from the Philippines and was my renal fellow. Never had anybody like her. I could trust her completely. I could go away for a weekend and come back and she had all beautiful notes, had everything in line.

And Elsa died of cigarette smoking. She had the weakness of being a chain smoker, and she developed emphysema, and she died of emphysema. She was in San Francisco. Her brother was a prominent newspaper editor down there for the *Philippine Times* or something.

But anyway, that's what happened, you see. Here's this really super-talented gal, and

I helped her so much to get started. She was hoping she could stay on here in the faculty. She gave a beautiful paper down at Stanford for us on a new disease, by the way—the baby was born in Doernbecher, and the grandfather was one of the senior faculty here. And so Elsa took care of him, and I took care of him, and Gerda Benda was the resident then—you've heard of her, haven't you?

WEIMER: No, I don't think so.

CAMPBELL: Yeah, she just retired. I helped her get started here, too. She was an East German girl who came across. See, that's another one I helped.

Anyway, Elsa Jacinto was just a remarkable woman. And anyway, things went badly for her health-wise, but what happened was a guy came here, whose name I won't mention, who was a real wheeler-dealer, and he had a younger wife, and she was very pretty, and they both impressed the chairman, so they kept her on instead of Elsa Jacinto. And I wanted to keep Elsa; I felt she was dedicated. This woman was just a politician, and she got the job instead of Elsa. I couldn't do anything about it.

And I went to Elsa and said, "Elsa, it's not in my power. Some things are in your power, and some things aren't." I said, "You're one of the finest physicians I have ever known," and I was telling the truth. And I said, "This other girl, she just shows up at the right time in the front row at rounds, you know, and smiles at everybody." And that bothered me a lot.

So anyway, Elsa went back to the Philippines, and her brother was a urologist there, and she stayed a while; and then she came back to San Francisco and we heard from her. We went down and saw her, and my wife and I had dinner with her. Our kids just loved her, as she had been in our home many times. She was just a remarkable woman. She was part Chinese, part Hispanic. That mix, you know, it's a beautiful mix.

I also brought a number of hypogonadal but phenotypical females to sexual maturity with hormones at adolescence. They were so grateful to be feminized. One made a trip up from Roseburg eight years later to see me, wearing a beautiful engagement ring.

So anyway, we were talking about something else.

WEIMER: Minorities and women we just talked about.

CAMPBELL: Yeah. That's good enough. We don't have to talk about my brilliant mother, who got a master's degree in economics when very few women went to college.

WEIMER: Only if you want to.

CAMPBELL: Well, I just thought the fact that she was a suffragette, she really burned

a passion for learning and fair play into my brain.

WEIMER: That's true. You mentioned that before our interview. I think that's important. I think our last theme is technology, growth of technology, which has been extraordinary. How has that affected your career and pediatrics?

CAMPBELL: Well, as the years went by I was spending more and more time deciding what kind of new equipment to buy for the lab, rather than doing the experiments. And of course the costs went way, way up. Once you get set up and running, though, it's a fantastic saver of time and effort, and it significantly simplifies monitoring patients, all these kinds of things. So it's probably the wave of the future. But it will never take the place—as I've told my students, no machine can ever put their arm around you and say, "Sam, you're going to be all right;" but they should give you the time to do it. Unfortunately, it doesn't seem to be the case, as cost-savings, time limits for patients, and bottom lines are the center of administrative attention.

WEIMER: True.

CAMPBELL: And so bedside technology is kind of cold, but whoever is delivering it can warm it up a little. But people are where it's at, you know that, and I do.

I am concerned also the direction that things are going. When you talk about the problem of technology, you're also talking about people distancing themselves from the patient, putting wires and other things in between them; and that's what we were just talking about from another facet, kind of the same thing. So we have to be very careful that in the name of efficiency we don't destroy human relationships; and that's what I think is happening in this country in a broad way, very, very broad way, and we have to really be very, very careful about all these things. It's kind of scary, actually.

So technology is merely an instrument for us. And inherent to its design, though, if it's done right, are many positive things. In other words, it's very difficult to do something bad with a machine that's designed to do good. But you know, there are machines that are totally indifferent, and so that's something I guess we have to think about, too, when we design them.

That's technology from my point of view.

WEIMER: I guess that leads me to a question, because you were talking about technology in the future. Where do you see the profession of medicine going in the future?

CAMPBELL: Well, that's heavy—I'm sure it won't go to herbals [laughing]. We're having a real big thing of fashion with herbals, but Linda, I don't think we really know where it's going.

I think where we must cast our net is where the big problems with the human race are, and those are population, the tendency to war-making, testosterone—too much testosterone in war, and in population development; unrestrained behavior and conscious devastation—autos kill 40,000 people per year, an accumulation far greater than all our wars.

Medicine has got to get heavily into these things. They've avoided it because, you know, they don't want to get involved in politics. It's always been really upsetting that psychiatry has not been more outspoken and more aggressive in making statements about the future of mankind with respect to war and alienation and all these things. And I think when you get too many rats in a cage, you start having bizarre behavior, and I think when you get schools as big as Silverton—it's a huge school—that may be part of the problem. These kids are alienated from each other. There are so many factors in that; it's very difficult to simplify.

But I do believe that we've got to reduce the size of the human population that's stressing the earth—but not by war, disease, starvation, or mass suicide by pollution, tobacco, drugs and alcohol. And we have to then have more time for each other.

WEIMER: Well, I'm not going to keep you all afternoon, so I'll just ask you one more question, and that is what are you most proud of in your career?

CAMPBELL: In medicine or...

WEIMER: Well, in medicine or just in your personal life.

CAMPBELL: I've published poetry, too. I haven't discussed that, but I don't think I need to.

It's hard to say. Career-wise, early I think I was batting near a thousand when you look back from when I had my wife helping me get up through the Phi Beta Kappa business and all that. I was really batting good there for a while. Then I think I got overkilled by all these challenges when at Oregon—they were giving me too much to do.

I read an article recently which might interest you and might be a forewarning for all of us, and that is they've found that elderly people can do just as well as young people in memory and in reasoning and all these other things if they don't try and do too much at once; that they cannot tolerate being asked to do several projects at once, whereas some of the younger people can do some such much better. The hazards of distraction.

So I think that's where I'm at now: I can do just about anything I did when I was younger, as long as I'm not interrupted and asked to do too many things. So that's okay.

Do you know many people that have C.Vs that are revealing of so much distraction, or perhaps, diversity?

WEIMER: I was quite impressed with yours, and for the record that goes in your file, your C.V. I have a copy.

CAMPBELL: But a lot of things you see were outreach—Reed College atomic reactor program. I had a real deep relationship with Dr. G. Doyle Daves at the Oregon Graduate Center. He's now president of an Eastern university. All these people were wonderful.

But you see, I got into so damn many things and raised so damn much money, for a guy who was just a little country boy, you know, I'm kind of proud of this whole business.

And then I went to China. God, that was something. All over China.

So that's your guy, and I know I have some people who still say I have some brilliant things that have to be written and published, and I don't know if I'll ever get to them. I'm awfully tired now. I really am. So we'll see. I would hope that I could get more done, but I kind of goad myself. After three hospitalizations in the last four months, I'm reluctant to push.

Here's another question, and I'm putting it back to you: If you know the solution to a very serious medical problem, what obligation do you have to work very hard to make sure it gets done?

WEIMER: Well, I think all we can do is do our best, and then let it go.

CAMPBELL: Yeah, I think so. You see, if I went through here, each one of these names that you don't know about—all of these names are people—now, she's a psychiatrist now, she's a forensic psychiatrist, this woman.

WEIMER: And what's her name?

CAMPBELL: Her name is—she got married—Susan Williamson. But all these people are unbelievable. John Matthews—these were all students—he's a physician in charge of the criminal justice system, medically, for the whole state of Kansas. I can just go through and pick these people out, you know. A number have been on the faculty here and around the world.

WEIMER: I think you can be very proud of your students' accomplishments.

CAMPBELL: Well, I think I've been pretty lucky in a lifetime to have such wonderful people to work with, you know.

Now, see the last page of my C.V.: here's my list of things I've got to do. I have the book almost finished, on acute tubular necrosis, and I have a few other things I've got to get finished. See, that's what's bugging me. So I am harassed by unfinished business.

WEIMER: Well, I don't think I'm going to take any more of your time this afternoon. So I want to say thank you very much and thanks for sharing your memories.

CAMPBELL: Thank you.

[End of Interview]

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