

UFHC 42

Interviewee: Dr. William C. Thomas, Jr.

Interviewer: Nina Stoyan

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S: This is Nina Stoyan-Rosenzweig, and today I'm interviewing William C. Thomas, Jr., M.D. Today is August 27, 2001, and we're here in my office at the medical center. Dr. Thomas, when and where were you born?

T: I was born in Bartow, Georgia, on April 7, 1919.

S: Did you grow up there? How long did you live in Georgia?

T: We were there just for a few months. My father was in the military and my mother came home from where he was stationed in Texas for my delivery. I was born there, and then we moved back to Texas and [then] to San Francisco, where my sisters were born one year after I was born. They were born in April 1920.

S: Were they twins?

T: They were twin sisters.

S: Were they identical?

T: No, not identical twins.

S: Your mother was from Georgia, then.

T: Yes. My father and mother lived across the street from each other in Bartow, Georgia.

S: That's how they met, then, obviously.

T: That's how they met.

S: Was your father a career military man?

T: No, he went into active duty in the army during World War I right after he got out of medical school. He stayed in the army for about eight or nine years until he retired in 1924.

S: Did he go overseas?

- T: Yes – San Francisco, then the Phillipines, and then China, and from China we moved to Florida when he decided he did not want to stay in the army.
- S: How old were you when you moved to Florida, then?
- T: I was five years old when we moved here from China.
- S: Do you have memories of any of those early moves?
- T: No. I just have one or two memories of China when I was four and a half years old. We moved to Gainesville in 1924.
- S: So, it was you and your twin sisters. Did you have any other brothers or sisters?
- T: No.
- S: What was your family life like once you got to Gainesville? I guess, basically, once you got to Gainesville all of your memories probably come from that period.
- T: My father went into private practice in Gainesville, and my mother was busy making sure that we did what we were supposed to do.
- S: Was she able to do that?
- T: Yes, because we did not dare disobey her.
- S: Was she a pretty strict disciplinarian?
- T: In a friendly, loving sort of way.
- S: She was firm.
- T: She was firm. She said what she meant and meant what she said.
- S: What were your sisters like? Did they have similar interests?
- T: They had similar interests with each other, not with me. They were too young for me – they were a year younger than I was.
- S: They were worlds away from you.
- T: Right.

- S: So, basically, you went through elementary school and high school in Gainesville. Which high school did you attend?
- T: It was called Gainesville High School in those days, and it was located on University Avenue just this side of what is now 6th Street. It's not there now. We had an excellent high school education. They were just great teachers.
- S: How many students were there in the school?
- T: There were about thirty, thirty-five per class. There were about a total of 500 in the school.
- S: When you finished with high school, you said you had an excellent education. Were you assuming automatically that you'd go onto college? Was that just something that everyone expected in your family?
- T: Everyone expected it, and I went to the University of Florida. I was accepted and went in.
- S: Did your sisters also attend college?
- T: Yes, the Florida State College for Women, which was located in Tallahassee in those days.
- S: What was your major in college here at the university?
- T: It was pre-medical – general sciences, a lot of chemistry, some mathematics, and biology.
- S: At what point did you know or were you interested in becoming a doctor?
- T: I think by the time I started college. I was sixteen years old.
- S: You started college at sixteen?
- T: I graduated [from high school] in 1940. I started college when I was seventeen.
- S: Did you skip a grade or something?
- T: Yes. I skipped the second grade in school. The teacher said I didn't need to go to second grade.
- S: So, you were a year ahead of everybody when you started in college.

T: Right.

S: And you knew right then that you were interested in biology and medicine. Were you exposed to medicine through your father's practice?

T: Yes, just through my father, the fact that he was a practicing physician and very busy at it.

S: Did he have an office at home?

T: No, he had an office downtown.

S: Did he talk about his practice at home, or did you see his patients at all?

T: No, none of that, just how busy he was.

S: And it was something that he loved?

T: Oh yes, very much so. He was a very well-known doctor in this community and highly respected. His father had been a doctor also.

S: Really? And he practiced in Georgia?

T: In Georgia.

S: Well, I would like to talk more about your father and the College of Medicine, but I want to go through your own experiences at medical school and your residency first. Did you have any professors at college in your undergraduate who made an impact on you? Was there anyone in particular who was special or any classes that were particularly meaningful?

T: Yes, in one sense. [An] English professor who was just elegant. [Charles Archibald] Robertson was his name. Chemistry with Dr. A. [Alvin] P. [Percy] Black, a chemistry professor who was a great teacher. Dr. [John Erskine] Hawkins, also in chemistry, was a great teacher. I enjoyed them very much, and I still remember them.

S: In just looking over your research, you do have a chemistry focus, in a way, looking at calcification in calcium. Was it your experience with these teachers that made chemistry particularly interesting?

T: No. They were just very good and very stimulating and very demanding.

S: Was this organic chemistry or physical chemistry?

T: Mostly organic chemistry, organic and analytical chemistry. Those were the two phases of chemistry I enjoyed the most.

S: And English as well. Was this a teacher who taught writing or literature?

T: No, this was literature, like Shakespeare.

S: You went to Cornell for medical school after Florida.

T: That's correct.

S: Was there any particular reason why you chose Cornell?

T: One, my grades in college were not particularly outstanding. I had almost a B average. But there was a friend from Gainesville, older than I was, who was at Cornell, and he liked it very much. So, I applied there, and I got accepted. Cornell Medical College in those days had just moved to New York City. It was not at Ithaca, New York; it was in New York City.

S: Was it in Manhattan?

T: Yes, in Manhattan.

S: You went from Gainesville to Manhattan. What was that like, the move to the big city?

T: It was quite a different experience, but I got along fine. I had an elegant roommate, and we rented a condominium that cost us \$110 a month.

S: Each or altogether?

T: Altogether.

S: Where was that in Manhattan?

T: 68th Street and York Avenue, where the medical college was located. We lived right across the street from the medical college. We had to cross the street to get into the door of the medical college.

S: That sounds like an ideal location.

T: It was great.

S: Did you have the same roommate, then, all the way through medical school?

- T: All the way through medical school, and I still have contact with him. He came to visit us a few months ago.
- S: Where does he live now?
- T: Connecticut.
- S: So, you were at the Cornell Medical College. You said it just moved, so was it basically starting from scratch? Were there all new facilities?
- T: No, it moved from Ithaca, New York, down to New York City.
- S: But did it move into new facilities?
- T: It went to new facilities.
- S: So, were things still pretty much new when you started there?
- T: I think the hospital and the medical college building were built in 1938, and I went up there in 1940.
- S: They had a few years to get things worked out. Did you have the sense that you were among the early classes in that particular college?
- T: No, we didn't have any sense of that at all, because Cornell had been an active school in Ithaca before it moved to New York, and students just moved down to the city and everything stayed the same.
- S: Do you feel that you got a good medical education there?
- T: I thought it was excellent, yes.
- S: How would you describe it? What were your classes like? How did they start you out? Was there anything new about it?
- T: The teachers were very anxious to say things that we could understand, and we appreciated that, and they were quite ready to answer questions that we had. We thought it was excellent because it was obvious that they were interested in the students and in the knowledge that the students were gaining.
- S: They really were student-focused. Did they have the basic lab courses and things like that?
- T: Yes.

S: Did you have animal labs and those sort of experiences?

T: We had anatomy where we dissected a human body. Every two students were assigned one human body to dissect. Then we also had things like a biology laboratory where we worked with animals. And we had chemistry laboratories where we worked with chemical substances and chemical reactions – carbohydrates, proteins, fats and things like that. That was before we got into what we called the clinical sciences, which was the third and four year of medical school where you started dealing with patients.

S: So for the first two years, did you see patients at all?

T: No, not that I recall.

S: Okay. It was all classrooms. What point did you decide on your specialty or how you would specialize?

T: My father had been in mostly obstetrics and gynecology, but I was interested in either surgery or medicine. Medicine seemed to be the most stimulating for me, so I applied for a medical internship, and they accepted me.

S: When did you do your medical internship?

T: That was after you got out of medical school. World War II was going on then, and so we graduated, instead of June 1944, which would have been four years of medical school, we graduated six months early in December of 1943. I started my internship in internal medicine at that time.

S: Basically, then, they finished you six months early. That was because of the war?

T: That's right. We went to summer school. So, we went year-round, and that finished me six months early. They did that in all medical schools around the country.

S: At this particular point in time?

T: That's right, just as a means of getting doctors into the service soon.

S: Then when you became an intern, I notice you also were in the medical corps. Did you go through a year of internship and then go into the medical corps?

T: Then I was put on active duty in the military after my internship, right.

- S: Let me just go back to the clinical work that you did when you were in medical school. What was your clinical education like?
- T: We worked on the wards at both what we call New York Hospital and another big hospital in New York City, Bellevue Hospital. There, as students, we were supervised by residents and by faculty who would look at our examination of patients and review them correctly and make sure that we understood what we were doing .
- S: Did they expect you to do research on the cases that you were seeing?
- T: No, not while we were at that stage of the game. Now, later in my house-staff training, we did what we call clinical research. We would be a participant in a clinical research project and we'd make sure the patient got his medicines on time and this sort of thing. And we draw blood tests on the patients.
- S: I know you said you still see your roommate from that period, what were the other medical students like?
- T: Everybody was kind of individualized. For example, with me and my roommate, we had four or five students, with whom we were very close, who [went] out to dinner occasionally and [went] back and forth across the street daily. We liked each other, respected each other, and each was interested in learning as much as he could. That's what it was all about.
- S: When you did your internship, you're at the New York Hospital, is that near the Cornell Medical College?
- T: It was physically connected, it's an eloquent-looking hospital if you've ever been to New York City.
- S: Is the original building still there?
- T: It's still there, they've added to it now.
- S: What were your days like when you were an intern? Can you describe what your schedule would be? What time did you get it? How many hours a week you were supposed to be on?
- T: When we were interning we lived in the hospital. We were on duty every other night. We would [be] called for any emergencies that went on in the ward to which we were assigned. We had to be on the ward to see patients at least by eight o'clock each morning, and we would get through routinely between five and

six o'clock each evening. But if we were on night-call, we would make rounds around ten o'clock at night just to make sure everybody was all right.

S: How many patients would you be seeing? Just as many as there was in the hospital?

T: There were thirty in a ward at New York Hospital. In Bellevue Hospital, there were more, there were sixty we were assigned down there, which was just for short periods of time.

S: What sort of patients were these, low-income, or just basically middle-class? Or was it different in the different hospitals?

T: We were primarily involved with low-income patients, who did not pay doctor fees, and paid only part of hospital charges. What we call the private patients in the hospital, we had rotating internships there where we would just be there for a few weeks at a time and there we would be under close supervision of our attending physicians. We participated in the evaluation of a private patient. [That was for] like six weeks every six months and we didn't like that very much.

S: Why was that?

T: Because our relationships with the patients weren't as close as they were on the wards where the patients were dependent on us for the care. Of course, we were being supervised very closely, but the patients knew that.

S: You really got to know them on the wards?

T: Yes.

S: How did you fund your medical school? Did you work to go through medical school?

T: No, my father gave me a check for \$1,800 each September. That paid my tuition, which was \$600 a year; it took care of my room and board and extra money [for] my needs during medical school days. That was it, daddy gave me no more, nor mother.

S: You had to budget your money carefully then?

T: We had to be careful, we could go out to dinner maybe once a week, by out to dinner I mean that we could go to a restaurant downtown. We could go to the theater and see a play maybe once every three months. That cost \$7 [or] \$8 dollars in those days.

S: That's quite a difference from today.

T: Correct.

S: As an intern, were you getting any sort of salary or were you paying them?

T: As an intern, no salary. I [had] room and board, I lived in the hospital. When I became a resident, I got \$25 a month.

S: That's amazing to think about. You were in the medical corps after your internship for two years?

T: Correct.

S: You said you were on active service?

T: [Yes] active duty.

S: Did you go overseas then?

T: Yes.

S: Where did you [go]?

T: After getting my basic training in the military, I was sent to Guam, where I was assigned to a general hospital, [the] infectious disease section of a general hospital. That's where I stayed for over a year. It was a first-class hospital.

S: In Guam, in the Pacific, there's a chance of seeing a lot of tropical diseases, did you see any?

T: There were not much in a way of tropical diseases on Guam, we saw a little malaria. It was mostly infections, in my section, which was infectious-disease section, pneumonia, intestinal infections, things like that.

S: You didn't see a lot of the injuries [from battle]?

T: No, those that had been injured in battle, they went to the surgical services. They didn't come to the medical services.

S: Was there any impressions that you had of this service?

T: No, except of good medical care. We were quite satisfied with the quality of care and with our responsibilities. We were anxious to do a good job, and our

superior officers looked at us very carefully to make sure we did a good job with our patients. We were very closely supervised.

S: Your patients were from all servicemen presumably, or did you see a wider range of people?

T: They were mostly from the Army, in contrast to Marines or the Navy. There was a Navy general hospital about two or three miles away from the Army general hospital. In Guam, all the patients from Iwo Jima and places like that, they were sent down to Guam when they needed hospital care.

S: Were you in Guam after the war? I noticed that you were in the medical corps until 1946.

T: Correct, and I think peace was declared sometime in 194[5]. That was when the bomb hit Japan, shortly after that peace was declared. There was still soldiers over there and we took care of what infections they developed.

S: [You were at] Guam when the bomb was dropped?

T: No, I was going to Guam, I was at sea on the Pacific.

S: You came back and you did your residency at New York Hospital from 1946 to 1949?

T: Correct.

S: That was in medicine? You were making \$25 a month?

T: Correct. Well it increased gradually, so by the time I left, I was getting \$50 a month.

S: That's not bad, it doubled in three years.

T: And I had gotten married, so that was very important.

S: When did you get married?

T: Ask my wife, I don't know. I got married in late 1946, shortly after we got back. I met her while I was in the Army, her brother introduced us, he was in the Army too, a military administrative officer. We liked each other, she was born and raised in Argentina, and went to college in the States. We decided to get married when I got out of the Army and that's what happened, we got married in October 1946.

S: Did you get married in Gainesville?

T: [Yes,] in Gainesville.

S: She was with you when you were doing your residency in New York City?

T: Correct.

S: Do you have children?

T: Yes, we have four children.

S: What are they doing now, boys, girls?

T: Unfortunately, one of our children was mentally retarded when she was born, she's out at Tacachale and has been there since she was eleven years old, she's now fifty. The other three children were two girls and one boy. One daughter is on the faculty at Princeton. She teaches environmental controls. She got her Ph.D. in chemistry at Cornell University up in Ithaca. One daughter is a landscape architect who lives in Bethesda, Maryland, who was down to visit us last week. Our son who is a photographer in Nashville, Tennessee.

S: They really do a variety of things.

T: Correct.

S: What are their names?

T: Our youngest daughter is named Valerie. We [have] a place [in] Kingsley Lake, Florida, and she's there with her two children right now, and will be there through the end of this week. Our oldest daughter is named Sharron, she went back [last week] to Bethesda, Maryland, where she lives, she's the landscape architect. Our son is named Clark, that's my middle name, Clark, and our daughter, who's at Tacachale, has the same name as my wife, Brenda.

S: Were any of them born when you were in New York City?

T: [Yes], our oldest was born in 1948, and the next was born one month after we moved to Gainesville [in] 1949.

S: After your residency, you moved down to Gainesville and you went into private practice in internal medicine?

T: Correct.

S: What prompted that decision?

T: I just liked internal medicine in contrast to surgery or things like that. There was a person that I knew who [had] actually been the reason I went to Cornell, [his] name was Henry Graham. [He] said I could go into practice with him and he was doing internal medicine, so that's what I did.

S: He was down here in Gainesville?

T: He had come back to Gainesville after finishing his residency training in the Midwest. He went to Cornell and then he went to the Midwest, then came here.

S: Were you also happy to get back to Gainesville?

T: Yes, very much, we enjoy it.

S: Was [your wife's] family living in Argentina?

T: [Yes, her father] had gone down to Argentina with the Bank of Boston that [he] developed in Buenos Aires. They were still in Argentina when we came to Gainesville; subsequently her parents moved to Gainesville when he retired.

S: That must have been nice for her to have them close by. When you went into private practice in Gainesville, what was the physician community like, were there many doctors here?

T: I don't know how many was many, but [in] contrast to today, they were few. In internal medicine, there were only three or four doing what we call internal medicine. Henry Graham and I were two of those three or four. There were quite a few general practitioners, a few scattered surgeons, a few ear, nose and throat doctors, and that was it. There were enough doctors for the community but the community was quite small, about 17,000 people here.

S: Where would people go for major surgery?

T: It depends on what you mean by major surgery, but they would have gall bladder, appendectomy, that kind of surgery done here in Gainesville. If they had to have lung surgery or cancer surgery, they usually went to [one of the hospitals in] Jacksonville.

S: When did they start talking about starting the medical school here? Was that in the works when you came down to do your private practice?

T: Was that what?

- S: I know that there was a period of years when they were planning to start the medical school but were really just working on all of the background, the structure.
- T: I would say around 1947 or 1948 they were talking about developing a medical school at the University of Florida, and the argument was, where is it going to be? Finally, there was a fellow named Bill Shands [William Shands], who convinced them that Gainesville was the place for the medical school. This medical school, as you probably know, was opened in 1956.
- S: So you were down here until 1954, and they were talking about the medical school. Did you have any interest in it at the time?
- T: At that time, I decided I wanted to get more training and a sub-special in internal medicine. [I was thinking about doing] what we called academic medicine, in contrast to private practice. Although I was successful in private practice, I made a good deal of money – that's small compared to today's income. When I got out, I was making \$20,000 [to] \$23,000 a year by the time I quit.
- S: What would you say the average physician salary would have been at that time?
- T: I think I did very well, and general practice probably around \$15,000 to \$20,000, and surgery maybe \$30,000 to \$35,000.
- S: So you did private practice, and then you decided that you really wanted to specialize more. You did a post-doctoral fellowship, after that, starting in 1954. Where did you go for that?
- T: At Johns Hopkins University in Baltimore.
- S: That was actually a fellowship through the NIH, so that was competitive?
- T: They supported me, I applied for the fellowship from NIH because they paid \$6,000 a year, that was my fellowship income on which I had to live. My father said, that's it, you're not going to get anything from me. That was enough, we could live on it, my wife and I and our two children.
- S: Basically, the family moved up to Baltimore?
- T: Right.
- S: You were specializing in endocrinology?
- T: Correct.

S: Was there anything that led you to chose that particular specialization in internal medicine?

T: I'd had some special attachments in endocrinology when I was at Cornell during my residency days. I had spent some time in endocrinology at Cornell Medical College. I spent six months doing endocrinology while I was a resident up there. I enjoyed it very much, so I decided that's the area I want to go into. Hopkins had a very notorious name in those days. I got accepted as a Fellow there, then I had to find financial support while I was going to be a post-doctoral Fellow there. I had an acquaintance at NIH from Cornell and he made sure that I got an award.

S: When you were doing that then, what did that consist of? Were you doing research, lab research, were you working with patients, both?

T: Yes, we [were] working with patients, we did lab research involved with the patient problems. My superior at Johns Hopkins was interested primarily in what we call calcium metabolism. If the patients had problems with calcium or bones and it turned out kidney stones, we saw those patients, tried to find out what was causing their problem and what was the best thing to do for it. That's the way we worked.

S: What sort of conditions were you seeing there, obviously the kidney stones, but what other calcium metabolism problems?

T: There were patients with Vitamin D-resistant rickets, there were old people with thin bones, osteoporosis, and those were the most frequent bone problems. Then we saw people with high-blood calcium or low-blood calcium, overactive parathyroid glands, underactive parathyroid glands. Those were the patients that we saw on the wards.

S: So the parathyroid is involved in calcium metabolism?

T: Yes, parathyroid glands keep your calcium up to where it belongs. If the parathyroid gland becomes overactive, it gets too high and that can be very dangerous to your kidneys or your brain.

S: Do you tend to get calcium deposits in those areas?

T: Yes, in what we call the solid tissues, the muscle, kidneys.

S: How do you treat a condition like that?

- T: If it was overactive parathyroid glands, there are four parathyroid glands in the neck normally and if one of them is overactive, or [if there's] a tumor in it, you take it out. If two of them have tumors in them, you take them out. That's the way you treat it.
- S: With the rickets, was that mostly children?
- T: We were dealing with adult patients. We saw patients with rare forms of rickets, not what we call Vitamin D deficiency. There are people whom have what we call a resistance to Vitamin D, it doesn't work in them. They treat them with something else.
- S: What leads to that sort of resistance?
- T: It's an inherited disorder, a chemical problem that is not very common at all, but Hopkins being the place [that] it was, patients were referred there from all over the country, so we got to see them.
- S: Not only does Hopkins have the reputation that it does, it really was a center for this particular type of diseases?
- T: Yes, the man who was head of endocrinology was primarily interested in this kind of problem. We also saw thyroid problems, some diabetes, but diabetes wasn't the major interest, so we didn't see very many of that kind of patient.
- S: It looks like you did the post-doctoral fellowship for two years at Hopkins.
- T: Three years.
- S: It says here you became a Research Fellow then after two years.
- T: That was just another source of my financial support. That's all, everything stayed the same.
- S: The basic research and everything else was the same?
- T: Right, and my boss thought I would go out and be on a faculty somewhere.
- S: After three years?
- T: Yes, but I had enough training in endocrinology to function effectively.
- S: When you went and you worked with this person, what was his name again?

T: Where?

S: At Hopkins.

T: John Howard.

S: Were you specifically interested in calcium metabolism before you went?

T: No, I became interested in it because he was and he stimulated our interest to learn more.

S: Was he then an inspiring person to work with?

T: Very much so, yes, he was elegant.

S: You said that he decided it was time for you to go off on the faculty. Was he a mentor for you, did he help shape your interests?

T: He was training people who were faculty-oriented, the other Fellows there were all being trained in endocrinology to assume faculty positions in some medical schools somewhere in the United States or in Canada.

S: Did he have any suggestions as to where he thought you should go for your faculty position?

T: No, other people had some suggestions but he didn't. He just said, you go out and get to work.

S: Who were the other people who had some suggestions?

T: They were people I had known before Cornell, and then they had a medical school down here. I applied down here and I got accepted.

[End side A1]

S: We are now talking about you finishing up your fellowship in 1957, did you apply to any other place other than University of Florida?

T: Not at that time, no.

S: You went down to Florida in 1957, the medical school had been open for a year at that point?

T: It opened in 1956.

S: You came down as an assistant professor of medicine. When you were applying, who was the major person who talked to you? Did you interact with George Harrell?

T: No, Dr. Harrell was the dean of the medical school at that time. Dr. Sam Martin was chairman of the department of medicine. I wrote to him and he came up to Hopkins to visit me and talk to my boss. I remember him walking into the laboratory and looking at what I was doing with calcium, urine, and things like that. Then they gave me a job as an assistant professor.

S: What was your salary in those days?

T: My memory has it around \$12,000 a year.

S: If you had stayed in private practice, you certainly would have been making more?

T: Yes, we were just interested in enough, we weren't interested in making money.

S: You're more interested in research and seeing patients and teaching. When you first came down as an assistant professor, what were your duties?

T: My job was in the department of medicine as an assistant professor, I was what we called the chief of endocrinology. It was my job to teach medical students endocrinology, as seen by adult patients with endocrine disorders. Those calcium problems, thyroid problem, diabetes, those kind of diseases that was my job to do that sort of teaching.

S: Were you teaching in the lab or were you teaching more with patients?

T: On the wards, I'm teaching on the wards.

S: Were you doing research at this point as well?

T: Yes, doing research in kidney stones primarily, kidney stone disease. We were interested in determining the cause of kidney stones, there are multiple different causes and we were working on that.

S: And different types of kidney stones?

T: Right.

S: I guess not all of them are caused by calcium?

- T: No, but we were interested primarily in the calcium containing kidney stones.
- S: One thing that I was reading about with your interest in kidney stones, that there was a kidney-stone belt in the United States and that Florida was in the middle of it.
- T: Florida is one of the states in which [there] is a high incidents of kidney stones in the Southeastern United States, that is true, in contrast to the north Midwest, where the incidences of kidney stones are much lower. This is with calcium containing stones. The explanation for that has not yet been determined.
- S: I was wondering about that. I had just seen an article that's from 1981, and I was wondering if people have since figured out, why Florida?
- T: No, some of us think it may be due to a deficiency of trace elements in the soil and in the water, but we do not know that yet.
- S: When you first started doing your research and you're interested in kidney stones, was it apparent that Florida was in the kidney-stone belt?
- T: Yes, it was known then, there was some doctors, particularly in North Carolina, who were much interested in the regional distribution of kidney-stone disease throughout the United States. Florida was one of the areas in which there were a lot of patients with kidney stones.
- S: Does it have anything to do with age?
- T: Well, a little something to do with age, in the sense that calcium containing kidney stones are predominantly seen in white males in contrast to black. Males versus females, more often in males, kidney stones with infection are more often seen in females. At any rate, after you get real old, in your sixties, you get where you don't make stones anymore, calcium-containing stones, we think that's because the kidneys are not able to make a concentrated urine when you get old. So after age sixty-three, we stop their medication, and still do that.
- S: So what is the age when you are most likely to see them, fifties, middle age?
- T: Late teens, seventeen, eighteen, twenties, thirties, forties.
- S: This is just a personal interest – anything related to climate, temperature, the fact that people are more likely to become dehydrated [in Florida]?
- T: That may be a contributing factor, but it is not a deciding factor, because there are areas in Canada where kidney stones are quite common.

S: You said that white males are more likely to get them, is there any other genetic component, does it run in families or anything like that?

T: Yes, they are familial forms of kidney stones.

S: What other [elements cause stones]? You said calcium, what else?

T: Calcium containing kidney stones are the most common type of kidney stones. There are about eleven different types of kidney stones, different chemicals, you can be born with a deficiency that makes you make stones. Cystine stones, uric acid stones, oxalate stones, these are all metabolic arranged due to chemical disorders that you inherit.

S: So the calcium is less likely to be inherited, the other ones are more likely to be genetic?

T: Correct.

S: I had more questions about kidney stones but I wanted to talk about the early days of the college of medicine, so you're doing clinical teaching?

T: Correct.

S: What was the college like in those days?

T: There were [a] small number of faculty. I was the only person in what we call endocrinology, but there were about six of us in the department of medicine. We were responsible for teaching certain areas to our students and seeing patients with this type of disorder. The hospital wasn't open then, because the hospital didn't open until 1958. If we wanted to see patients with students, we went up to Lake City General Hospital. We can go up there with our students and we examined patients with the students up there.

S: Who else was in your department? You said there were about six faculty, Sam Martin was the chairman.

T: He was the chairman of the department of medicine and a fellow named Dr. Jape Taylor was in cardiology. A fellow named Bill Stead, he had a brother who was chairman of the department at Duke. Stead was in pulmonary diseases and I can't think of any others at the moment.

S: What was it like to be in the department that was fairly small, was that a good thing?

T: That was good, we had good relationships with each other, respect [for] the efforts of our associates.

S: You had a lot of contact with your colleagues?

T: Yes, we did daily.

S: Did you have faculty meetings or was this more of an informal sort of contact?

T: We had a faculty gathering at least once a week [to] go over what went on, [the] number of patients being treated by different individuals, and the quality of efforts. It was all very good. The department of medicine, I think, were going in pediatrics or I think were going particularly into surgery because there's a lot of contact between the surgeons in medicine and the surgeons in surgery.

S: There was also contact between departments?

T: Correct.

S: Would you say that there was more contact then, then perhaps now?

T: Yes.

S: Because of the size?

T: Because of the size, the interrelations.

S: Did you have much contact with Dr. Harrell?

T: He was the boss and was a very influential individual. [He was] very interested in the quality of medical care, medical teaching, [and] patient care. He was a stimulating influence and with no question about his attitude and ethics, everybody respected him.

S: How did that influence make itself felt? Did he talk to you?

T: He talked to us more as a group, in medicine, or a group of all of the college faculty. He would talk to us in medicine and then he would talk to surgeons in surgery. It was that sort of interaction, but there was easy access to him. If you wanted to talk to him about a problem that you had in medicine, with people in surgery, if you have a problem with a pediatrician, you could talk to him very easily, no problems, and he would smooth things out.

- S: I know he had a lot of strong ideas about the way that the medical education should operate and, as you said, patient care. What were some of his ideas that he communicated to the faculty?
- T: The quality of patient care, the outcome for the patient – those were the primary things. The attitude of the doctor towards the patient, and towards improving the patient, those were the things he was primarily interested in.
- S: I've read some of the other interviews that he really felt that doctors should be generalists first and then specialists. He encouraged physicians to work not just in their specialities but deal with all patients. Was that part of your experience?
- T: I'm not sure I'm familiar with that particular approach, but internal medicine, you didn't break it down into what we call the various specialities, like cardiology, endocrinology, rheumatology – [they were] all together. After you were well-versed in those particular disciplines, then you could specialize in rheumatology or cardiology.
- S: You all were more generalists to begin with, anyway?
- T: Right.
- S: A broad general sort of base that you're working on, or from. What about the medical students? I know the faculty was small, the classes of students were also fairly small at that point, weren't they?
- T: My memory is that there were around fifty or sixty medical students per class in those early days,
- S: Did you have more contact then with the individual students, would you say?
- T: They would assigned to medicine for a period of time, then we would have contact with certain ones of them.
- S: Is there any students that you remember from the early days in particular?
- T: I don't remember any the students.
- S: One thing that I'd heard from Dr. [Harry] Prystowsky's interview that there were problems between the Gainesville physicians and the hospital, and that your father actually was somewhat instrumental in sort of smoothing things over. I think, it was a problem with just the patients that the local physicians were reluctant to send their patients to the hospital. Were you aware of any of this?

- T: The medical school faculty were all together. They didn't have much interrelation with the doctors in private practice. The doctors in the medical school [faculty] wanted to keep the patients with them rather than refer them back to the community hospital. I think it was more disassociation rather than antagonism. The doctors of the medical school in general would think that their care was superior to that that was available in private practice. Although the occasional doctor like my father would be regarded as being able.
- S: What was your father's relationship then with the doctors at the hospital?
- T: It was always pretty good, but they weren't dealing with common medical problems. My father was just delivering babies and taking care of women after they had babies. He was regarded as an able doctor.
- S: I guess to a certain extent you could be a bridge between your father and the hospital.
- T: I had been in private practice here and had good relationships with the doctors in the community. I related to the doctors of the community. I knew whom I respected and whom I did not, in terms of their ability and in terms of whether or not they were primarily interested in the welfare of the patient or in their own financial welfare. There was an occasional doctor who was more interested in the dollar than in the patient, we thought, but there were not much of that.
- S: Basically, you were better placed to evaluate because of your own experience, and not just, say, your father's involvement to evaluate the community.
- T: Right, well, I knew a lot of the doctors because I had worked with them and respected them. Things went fine back and forth. I maintained good relationships with them as far as I was concerned.
- S: What were your impressions of Sam Martin? He was fairly a strong figure in the college.
- T: He was a smart internist, and very able. I think all of us in the department respected him for his abilities, and unfortunately he got off into what we call administrative medicine. He took over another job here at the hospital. He was very able, and came from a good medical school. He came to us from Duke, and he knew good patient care when he saw it.
- S: The three years when you were an assistant professor of medicine, you were also directing the division of post-graduate education. What was involved with that?

- T: I was just arranging courses for doctors in private practice. We would arrange short-term two- and three-day meetings, I was involved in that activity.
- S: So these would have been the seminars, basically?
- T: Yes.
- S: Were these for physicians from all over Florida, or the Southeast?
- T: Yes, all over Florida, but we primarily would see doctors from within a fifty- or seventy-five-mile radius of Gainesville.
- S: You were also at that point until 1970, the chief of the endocrine division. You said you *were* the endocrine division at first. How did that grow? Were you hiring new faculty?
- T: I had some postdoctoral Fellows that worked with me, and then stayed on. I think our first addition in endocrinology was a man named Dr. Joseph Shipp. He was interested primarily in diabetes. He was well-trained. We [convinced] Dr. Martin to offer him a job, and he did. He came down and he took care of diabetes.
- S: You were doing this until 1970, by 1970 how many endocrine specialists did you have?
- T: In 1970, I think we had three.
- S: By that point, I guess the department of medicine also had grown. What sort of changes, did you have the same sort of interactions with everybody then that you had at the beginning? How did growth affect that?
- T: It affected it in the sense that your time was spent differently, because you were dealing with individuals in your division. There were some more medical students, and then we had a VA hospital developing. [We were] enlarging our classes, more patient-care responsibilities. So it got where we weren't having as intimate and as frequent of contact with other members of the department as we had when we were small. It was still good.
- S: I know that Harrell, when he was hiring people, he had a particular goal of getting young people who were rising stars. Was that clear in the early years, did the quality of the faculty change at all?
- T: No, it didn't get any worse, not in the early years.

S: Would you say [that] it got better?

T: I don't think it got any better, it got bigger.

S: Just more people, but the same quality. Throughout this period, you were still doing your research, up till about 1970. Were there any particular directions in your research?

T: First in kidney stones, then the causes of kidney stones was it primarily what I was working on. Which had been a continuation of my work from Johns Hopkins when I was a post-doctoral Fellow there.

S: I was looking at some of your [early] publications, [and they] were not always as focused on kidney stones. Did you tend to become more focused on kidney stones as your research progressed?

T: In terms of research, yes, not in terms of clinical interest.

S: As far as the clinical is concerned, you were just seeing whoever came in.

T: Right.

S: With my own interest in the history of medicine, it seems that when you look at medieval medical texts and illustrations and manuals that there's a lot more at least with bladder stones. I was just curious if that was something that was more common at one point and then sort of decreased in frequency.

T: I had some short visits to China, and bladder stones in those days were very common in Taiwan and places like that in children three years old, two years old. [They had] big stones in their bladders, and this had to do with their dietary habits, they were vegetarians, primarily they made what we call oxalate stones. Bladder stones most commonly today in North America are due to infection. An infection can cause very large stones in the bladder or the kidneys. They were easier to remove technically from a surgical point of view, all you had to do was cut down there a little bit and take out the stone.

S: Are bladder stones actually different from kidney stones, or are they stones that have gone from the kidney to the bladder?

T: Primarily stones are most often caused by infection in this country. Where in kidney stones the instance of infection causes stones, but there are many other types of kidney stones.

- S: I wonder what aspect of the diet in the Middle Ages was contributing to their [stones].
- T: The children in eastern China, they are vegetarians, they were not meat eaters. These vegetables contained a lot of oxalate and the thought was, that was why they had the stones. When the diet changed, the stones stopped being so frequent.
- S: There's one period, 1969 to 1970, you're an honorary Research Fellow at the University of Manchester, did you go over to England for a year?
- T: Yes, that was just a sabbatical year. The man I went over there to work with was primarily working with vitamin D metabolism. He was a vitamin D expert in the world, Dr. Stanbery in Manchester, England. I was due for a sabbatical.
- S: You were interested in calcium and metabolism?
- T: Solely to calcium and vitamin D.
- S: At what point did they start putting vitamin D in milk?
- T: Just a few years ago, adding it to milk to make sure that people got vitamin D. A lot of doctors still don't know enough about vitamin D. They don't know that older people after age fifty-four do not absorb calcium as well as they did when they were younger. The metabolism don't work efficiently. They need fairly sizeable amounts of vitamin D to absorb the calcium, and a lot of doctors don't know that.
- S: So they don't tell their patients to take supplements.
- T: They don't give enough vitamin D to their patients, the older patients. It takes a lot of vitamin D to do the job in such patients.
- S: How much more than, say, someone in their forties?
- T: Four hundred units a day of vitamin D will do the job, you get that by going out in the Florida sunshine. You get that in your skin. When you get to be sixty years of age, to absorb the calcium normally that you eat, it takes about 2,000-2,500 units a day to compensate for the defective absorption. Actually, we give more than that, 50,000 units twice a week will correct the vitamin D absorption of older individuals, it takes that much, and they make vitamin D in 50,000 unit capsules.
- S: That's fairly significant, especially if physicians don't know and aren't prescribing extra of vitamin D at all. The first ten years [after you were hired] what sort of

expectations did they have for you, in terms of grant money or publications?
When you were hired, did they make that clear that they had any expectations?

T: It was mostly [to] find our own source of research funds, from one research agency versus another around the country. Often the National Institute of Health gave us research funds. They expected if you were doing a decent job that you ought to have at least three publications per year, if you were going to be reasonably productive.

S: This was related to your lab research, or was this also publications based on clinical observations?

T: Either one.

S: Was grant money easier to get at that point, or were there as many people fighting for it?

T: I think it was more difficult to get it at that time. It had to look like it was going to be productive research, and grants were quite small, it might be enough money to support a technician but that would be it, you know \$3,000-\$5,000 a year.

S: You weren't getting a half a million or a million dollars. At some points it looks like you had a tremendous number of different appointments, in 1965 you were chief of the endocrine division, professor of medicine, program director of the clinical research center, [and] acting chair of the department of medicine, how did you manage to juggle all of that along with your teaching, and all of your clinical obligations? What were your days like?

T: They were busy.

S: What time would you come in?

T: We got to work by eight o'clock in the morning and we usually got out about five o'clock in the afternoon. Then you had nighttime work to do at home, we were busy. A lot of these things were just titles, whether you were a professor of medicine or something else, the clinical research center took a fair amount of time.

S: A lot of these were just titles?

T: Right.

S: [They] didn't necessarily have additional duties or anything like that?

- T: Correct, my clinical research activity might take an hour a day.
- S: Were there many women on the faculty?
- T: No, I'm just talking about internal medicine. There was more in pediatrics and, of course, OB/GYN.
- S: Women tended to specialize more in those areas, it was probably more a matter of what women were specializing in than any sort of hiring?
- T: Correct.
- S: When did you start working with the VA Medical Center?
- T: I went over there as chief of the medical service in 1968.
- S: When you went over there, were you still coming back and forth between there and Shands? Or did you pretty much start focusing over there?
- T: I saw patients over here [Shands], largely, referral patients, private patients. I had what we call an endocrine clinic over here [Shands] which I was in charge of. Over there [VA Medical Center], I was involved in medical-student education [with] third-year medical students on the wards in the VA Hospital.
- S: Were medical students more likely to be over at the VA in their third year than here [at Shands]?
- T: They were divided between the two institutions, depending on how many medical students we had, and the number was gradually increasing. We had to provide good education for them, supervision evaluating patients, examining patients, getting a history, [and] philosophy of medical care.
- S: What was your philosophy of medical care, what would you impart to them if you were telling them about how you study the physicians responsibility?
- T: We're interested in how the patient got the disease that they had – were there factors that could be used to prevent it in terms of their daily habits? Did they inherit the disorder, or when they went back out of the hospital were they were going into an environment that would promote good health? There were all aspects of medical care which were interesting.
- S: Did you then encourage students to really become involved with their patients?

- T: We wanted to make sure that the students had some idea of what the living conditions were for the patient at home. At how they looked at taking care of themselves in terms of the quality of their diet and getting adequate but not too much sunshine to get their vitamin D. The quality of diet was very important, adequate amounts of rest, and not exposed to toxic chemicals.
- S: When did the VA Medical Center open?
- T: As far as I can recall it opened in 1968.
- S: You were involved with it right at the beginning?
- T: In the beginning, I went over there [to the VA] as chief of medical service in 1968.
- S: What were the conditions that students would see at there [at the VA] as opposed to say Shands?
- T: Probably not much difference, on medical wards here [at Shands] versus medical wards over there [at the VA]. There were infections like pneumonia, intestinal infections, kidney infections over there [at the VA]. You saw patients [with] malnutrition, poor nutrition, patients who weren't well educated, and didn't take very good care of themselves. We saw a lot more of that over there [at the VA] than over here [at Shands]. Financially, the patients were much poorer there [at the VA] than here [at Shands].
- S: You also were the chief of staff for research at the VA, that was obviously different then from your work with the students.
- T: That was primarily involved in promoting the research activities of the faculty, particularly the junior faculty. There was research funds made available from Washington to support research activities of the VA hospital, because it was thought to be an important part of the activities of the staff. They were involved in research and understanding disease, and making things better for patients. I did that for a number of years.
- S: It looks like at least twelve years you were the associate chief of staff. The faculty over at the VA was separate from that here [at Shands]?
- T: We were all the same, we were back and forth.
- S: Would you hire people separately specifically for that hospital, or would people just come in and move over there?

- T: They could be paid specifically by the veterans administration, but they would be hired for our purpose as a part of the department of medicine. The source of the salary which was an important factor, we had a certain number of positions available paid out of the VA.
- S: It looks like you also have an appointment with the department of food science [the College of Agriculture] how did that come about?
- T: That was just because we were interested in nutrition, the nutritional aspects of the disease. I had no active role; I'd go to their conferences, that's all. It was a courtesy appointment.
- S: Did you do any lecturing over there [at the College of Agriculture] for their students?
- T: [I] can't remember a single lecture.
- S: One other research interest that I noticed in your publication record was working with iodine as a disinfectant in the water supply. How did you become interested in doing that?
- T: We were interested in endocrinology and you've got to have iodine to make the thyroid gland work properly, and that's how we got interested in it. A chemistry professor, Dr. Black, was interested in iodine in the water supply in Florida. He wanted to know about adding iodine to the water, because iodine is deficient in different parts of this country. People were getting goiter because there's no iodine in the water. For example, there's very little iodine in Florida water. That's why I insisted, and still do, that my wife get iodized salt because we want at least that much iodine to protect our thyroid function.
- S: It was an interest in the deficiency, I guess the Midwest was one place.
- T: That's the major area of this country [that] is iodine-deficient, and southern Europe, where it's endemic.
- S: Can you also get it from eating seafood?
- T: Yes, [if] you have seafood once a week you get plenty of iodine. Its seafood in contrast to just freshwater fish.
- S: It has to be saltwater fish then?
- T: Saltwater fish, you get plenty of iodine from saltwater.

- S: I had known about the goiter problem in the Midwest, and that was why they started putting iodine in salt, but I didn't realize it could also be a problem in Florida. Is iodine naturally occurring in water in the northeast?
- T: There is some iodine in the water up there from the soil, so they don't have to worry about it like we do. Iodized salt is very commonly used in the country, for example, now and that gives you an adequate amount of iodine. If you don't have iodized salt, then you better get some iodine fish.
- S: You better work on your seafood. Is it just fish or shellfish as well?
- T: Any seafood that comes out of the ocean.
- S: You were interested in the parathyroid, how is that connected with the thyroid? Is that the thyroid gland, or is it separate gland?
- T: The parathyroid glands are attached to the underside of the thyroid glands, they are all physically together. That's the reason why they call it parathyroid because it's beside the thyroid. They are concerned with calcium control, not with metabolic function like thyroxin is.
- S: When you have this thyroid deficiency, you get the goiters, but then there are also problems with pregnant women who don't have enough for their babies and children are born with mental deficiencies. Did you see much of that?
- T: No, we always made sure that our pregnant women were getting an adequate amount of iodine salt.
- S: I guess that has been a problem, I remember hearing on *NPR* [National Public Radio] about something in China.
- T: Yes, [in] different parts of the world, no question about it.
- S: Was the deficiency severe enough in the Midwest to lead to that sort of problem?
- T: Yes.
- S: Did you do much work with the thyroid, other than this interest in iodizing the water?
- T: No, not any research work. We saw a lot of patients with thyroid problems. We [would] treat them either for an overactive thyroid or underactive thyroid. We may have to operate on the thyroid cancer, arrange for the operation and do it in surgery.

S: Iodine as a disinfectant in water, is it as effective as chlorine?

T: I can't answer that, I think it's very effective, but you don't have as much of it as chlorine in the water.

[End side A2]

S: We were talking about the thyroid, iodine and the idea of using that as a disinfectant. How does it affect microbes negatively when it's also obviously necessary for human function?

T: I do not know.

S: As far as your research with kidney stones is concerned, what are some of the discoveries that you've made? What can you tell me now about kidney stones that was unknown before?

T: The only thing we've been interested in is a deficiency in what we call inhibitors of crystal formation, that is the cause of the most common type of calcium containing kidney stones. We think we've identified it as a compound, as to what is missing. We don't know why it's missing, but we've got a U.S. patent on it, through the university, on the identification of this compound, which we call a cyclic dicitrate. We're still doing some research work through the department of biochemistry here to prove the structure. The people want us to be able to prove the structure of that compound, which we think we know, but we haven't proven it is correct. If it is cyclic dicitrate, why is it deficient in these individuals? Is it because of where they live? What they drink? What they eat? Is it because of something inherited? The most common type of kidney stone...there's a familial tendency among the men in the family to have that type of kidney stone. Is that because families tend to eat the same, or is it because of the genetics? We don't know those answers, but we think we've identified the most common cause type of kidney stones. We are still working on it though, and we hope in the next two or three months to have resolved the problem.

S: You say you do have a patent on it? At some point when you absolutely identify it, would you manufacture it and make it available as a drug or a supplement?

T: The substance people in nuclear chemistry up on campus have manufactured, the compound we think we could give to patients and prevent their problem. The other question is why are they deficient, and we don't know that. Is it due to some deficiency in trace elements which is what we suspect, but why is it familial? Is it because of the eating similarity in families, or is it because of the genes? We don't know those answers yet.

- S: Is anyone working on that particular research?
- T: No, except the biochemistry people are working on the structure of the compound. That's all we're doing right now.
- S: When you were working as chief of staff for research for the VA and you were the chief of the medical service in training student, you had a lab that was up and running. How many people would you have working in your lab?
- T: Two usually, maximum three.
- S: Were these students or technicians?
- T: They were technicians. Then I might have post-doctoral Fellows working with me who would participate in the research activities in the lab, just part-time. They would spend most of their time with patients.
- S: Your technicians were specifically working in the lab?
- T: Correct.
- S: Now you're saying that you're working on this, do you still have your lab up and running?
- T: We've now closed it as of two [or] three years ago. But the biochemistry people are still working on that.
- S: That's here at the hospital, or the medical center?
- T: Correct, and up at nuclear science.
- S: It also looks like you became involved in geriatric research at the VA starting in 1985. What did that involve?
- T: The VA in Washington, they had what we call Geriatric Subs that they established around the country. [These were] to train doctors who were primarily interested in old patients. They gave us some money to develop a Geriatric Center, and there are a number of them scattered around the country. I was selected or identified as the person to organize such a facility. So we developed what we call a Geriatric Center, which is still operating at the VA hospital. They have five or six faculty members, their salaries are paid for by the VA and they deal primarily with medical problems of the aged. There's six doctors, I think, on the geriatric unit, they have facilities at the VA hospital. They have clinical appointments at the College of Medicine.

- S: Were you responsible for hiring them originally, just setting up the whole center and getting it going?
- T: Yes, I was responsible for hiring. We [received] applications from people around the country and selected them.
- S: How much would you say the higher administration of the university was involved helping or hindering you in terms of the VA or setting up centers like that? Did you have much contact with them, or were you working more at the level of the hospital?
- T: We work with the respective departments. As far as we were concerned at the VA, nobody would be accepted at the VA that was not acceptable to the chairman of the departments here in the medical center. They were all involved in teaching, research, and interacting, so the university was a final voice in identifying such individuals.
- S: Were you involved in the planning of the geriatric center, the research center in getting the funding? Or was that something that had already been established and they turned to you?
- T: It was established and we just needed to hire the people who already had geriatric interest, or who wanted to do research in geriatrics.
- S: Were you still teaching while you were doing this? Were you still doing your clinical work?
- T: [I] was still doing clinical work.
- S: It seems to me that you do have a lot of administrative background, what sort of skills do you think you brought to that particular aspect of your work administration? Did you feel that you were using a lot of diplomacy? What made you suited for that?
- T: I don't have any answer for you. I do not know, we want to create an environment that would be good for either research, teaching, or both. We are interested in people we worked with, and that they would be interested in promoting the education among their juniors, like students, interns, or residents.
- S: When you were selecting people, were you thinking about them not just as researchers, but how they would interact with students?
- T: No question, we had to.

- S: Was there anything that you could quantify? What was the attitude that you were looking for?
- T: Well, whether they were interested in developing other people to be expert in particular areas. If they were totally interested in themselves, then we were not interested in them.
- S: Or if they were totally interested just in research or something like that?
- T: Correct.
- S: Obviously education, and developing students to become physicians was important. What would you have to say about your interactions with the students? You've won some science teacher awards and things like that. How did you develop your relationship with students?
- T: In the early days, I had a lot of contact with the students in giving lectures, talks, and having them assigned to endocrinology for rotations. After I accepted these administrative jobs – chief of research service or chief of medical service – you lose direct contact with the students, and you're dealing primarily with junior faculty or house officers in a residence and interns and not with students anymore. Other people are taking over those areas of responsibility.
- S: Was that something that you missed then?
- T: I enjoyed that very much, and I enjoyed my contact with phone-call house officers, continuing through the years we like to see a house officer. By a house officer, I mean an intern or resident, develop an interest in learning more and doing more for the patients, that's what we promote.
- S: Obviously your contact with students did become more limited, but do you think that students have changed over the years?
- T: I think adversely in the sense that students don't have the intimate contact with the faculty that they used to have. I don't like that, medical school has gotten too big and the interest seems to be on financial aspects more than quality patient care, and getting patients in and out, turning over the best use of capacity.
- S: So it's not even so much the students themselves, but just the way the hospital changed, and medical education in general?
- T: I think that's correct.

- S: I've read interviews with the early students who said that they really were like the family of some of the faculty, it was just so small that everyone had more connections. I guess to a certain extent that change is inevitable when you are growing. In terms of medical education, you think that generally medical students are losing out because there is less emphasis on the patient.
- T: There's not as much intimate contact as there was with the staff.
- S: Do you think that's been the case with patients as well, you say there's more emphasis on turning over beds and things like that?
- T: Not as much intimate contact between faculty and students as there was in the early days when they were closer.
- S: Do you see other changes occurring in medical education, is it more medicine in general? More technologically-oriented or less?
- T: I think it's certainly more technologically-oriented, there [have] been a lot of advancements at most. Like the different medications than there used to be.
- S: Different imaging?
- T: Personally, I think that's not good for the product being produced, by that I mean the student.
- S: How so?
- T: In the old days, the student wanted to be a doctor to take care of patients and see if they could get better, if he could help them get better. Today is more research, what accomplishments I'm making in private practices, how much money I can make. The emphasis is on quantity rather than on quality of patient care.
- S: I guess in some ways the technology does separate the physician from the patient.
- T: I think so, you're not so involved. You see the patient, not part of the patient, like the right elbow, not the left elbow. You don't talk to him because he can't talk, nor can he understand what you're saying.
- S: You're so specialized that you have a different language that you're using?
- T: I'm afraid that's too often true.

S: You're also talking about money and the focus on money. Do you think that it's become more competitive as well? Are medical students more competitive?

T: I don't know how to answer that.

S: Were talking about medical education, but it sounds like there's also things just about medicine in general that you are discussing, the changes that you see. You're not necessarily pleased with this tendency to specialize and the way the technology has affected that. You don't see that perhaps ever reversing, or going back the other way?

T: I think we need to emphasize more on quality patient-care which involves the entire patient, than we do. We tend to be too specialized in our own little areas, or not as actively interested in the total patient as we should be, nor in teaching the students about the total patient. We don't have the opportunity to do it anymore because our time is so divided.

S: A physician or clinician just doesn't get to spend as much time with the medical students. What other responsibilities do they have now, that is preventing that [time with the students]?

T: [I] don't know, I'm retired now, as you know.

S: When you retired in 1996, the position that you retired from in 1996 was the chief of staff of the VA medical center. What was that?

T: I was just interested in the quality of patient care on all parts of the hospital was good. That they were actively doing their job, seeing a number of patients and having good results. That's what you did administratively, you dealt with the staff, had no contact with students and essentially none with the house officers either. It was just with the staff and the hospital who were the assistant, associate, and full professors.

S: That was really administration?

T: What you were interested in was the quality of care, and the patient benefitting from the care being received. That's what you were primarily interested in, [that] they were all the beds available being utilized.

S: How would you insure that the staff was really focused on that quality of care?

T: You had reports from everybody – the food science people, nutritionists, nursing staff, and one department versus another. The people in medicine would say those surgeons, we asked them to see a patient and it takes them three days to

get there. We are interested in promoting interaction to improve patient care efficiently with a gentleness.

S: Gentleness but firmness.

T: Yes, gentleness as far as the patients is concerned.

S: Firmness for the staff.

T: Correct.

S: In this position, the chief of staff were you involved in hiring or was this mostly just all of these interactions?

T: We were involved in hiring, the department chairman from over here would select the individual and get us to say, all right, that's good. They would be looking for a source of financial support.

S: So the VA's funding is from the government?

T: Correct.

S: Is that an easier and more guaranteed source of funding than they have over here [at Shands]?

T: I don't know, they've done pretty well at the VA. They do not meet the same financial responsibilities that the College of Medicine does. The salaries tend to be lower and the retirement benefits are distinctly less than the College of Medicine, but they're pretty good.

S: You haven't been in private practice in awhile, and we've been talking about medicine, medical education, and hospitals. What about in private practice, do you think medicine has changed there from whatever contact you have?

T: It seems to have changed, and the quality of patient care is not as emphasized today as it was.

S: What's the role of insurance in all this do you think? In the quality of patient care, are the HMOs driving this?

T: The insurance programs are a major factor because in private practice, in the old days, the doctors always took care of what we call indigent patients. With no charge, they just take care of them, [and] made house calls. The same thing was true of the hospital, like Alachua General Hospital, before it was Shands

Hospital. They had a section for taking care of indigent patients, who didn't pay a nickel for their care, those who can't. A percentage of the time the doctor was devoted to that type of activity. That was community responsibility, but now the insurance programs, [and] HMOs are a dominant influence.

S: In terms of driving up costs of health-care? Or determining who the doctor treats and how much time each physician spends with the patient?

T: The cost of health care becomes exorbitant, like the cost of medicines have become. I bought some pills for my wife the other day and it cost me \$85 for a few pills.

S: That really is unbelievable. It's also the pharmaceuticals who are wanting to make their profits.

T: They want to make a good profit, but also its become very complex to manufacture various medications.

S: Where you have all the research and development, the advertising, and things like that. It's very different from the nineteenth century when physicians were mixing their own medicines. I guess we can talk briefly about your sense of research in the hospital, whether that's changed. We did talk about how you think that quality of researchers or faculties remain the same. What about the research in general—do you think that it's been more or less creative, or contributed to medical understandings of the nation as a whole? What role do you think Florida has played in that?

T: Medical research has become more active, [there's] much more of it going on. The quality of research may be taking the place of the quality of patient care. There is an a lot of research activity going on and we are learning more.

S: In the beginning were there any researchers who were uninvolved with the clinical side of things, or was everyone who came in as a faculty member also a clinician?

T: It depends on the department you're talking about. If you're talking about the biochemistry department, they were not involved with patients, but in surgery, medicine, obstetrics, or pediatrics, they were all primarily involved with patient care and research activities involving patients and patients' diseases. Today the research activities may take you away from patient care.

S: That's another thing that's changing the patient care is more focus on research. We've also talked about the money that's available, there's certainly a lot of money available for research now, huge grants up to one million dollars. You

did teaching, research, and administration, how would you like to be remembered if you're thinking about your contributions to medicine? What would you say is important to you in the things that you've done?

T: The only thing important to me is the quality of patient care.

S: Just focusing others on the patient, trying to keep that focus for the physician. When you retired in 1996, you said you'd continue researching and seeing patients, have you been doing that? Obviously you come in regularly to the hospital.

T: Yes, I still see patients on Monday afternoon at Shands Hospital, [and] on Tuesday morning at the VA hospital who have particular problems in my area of special interest.

S: Are some of these patients that you've been seeing for years?

T: Yes, that's at Shands. At the VA hospital there are different patients that come and go.

S: What else have you done since then?

T: [I'm] still involved in some researches that I mentioned previously.

S: The factor that is missing. Your focus on your retirement, you've still been active in medicine, but anything else? Have you traveled, or taking it easy?

T: Taking it easy, doing yardwork.

S: I want to thank you very much for interviewing with me. Do you want to add anything?

T: No, not a thing.

[End of Interview.]